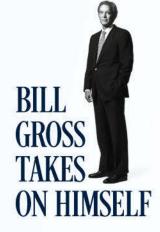
THE RIVALRY ISSUE
JULYALIGUST 2015

Blesmberg Markets



VAROUFAKIS VS. GERMANY'S WOLFGANG SCHÄUBLE



CARL ICAHN TAKES ON EVERYONE

> INDIA GAINS ON CHINA

STREET SCHISM

LLOYD BLANKFEIN vs. JAMES GORMAN

PLUS: WHO IS THE BEST CEO IN BANKING?

EMC VS. HACKERS ALL DAY, EVERY DAY

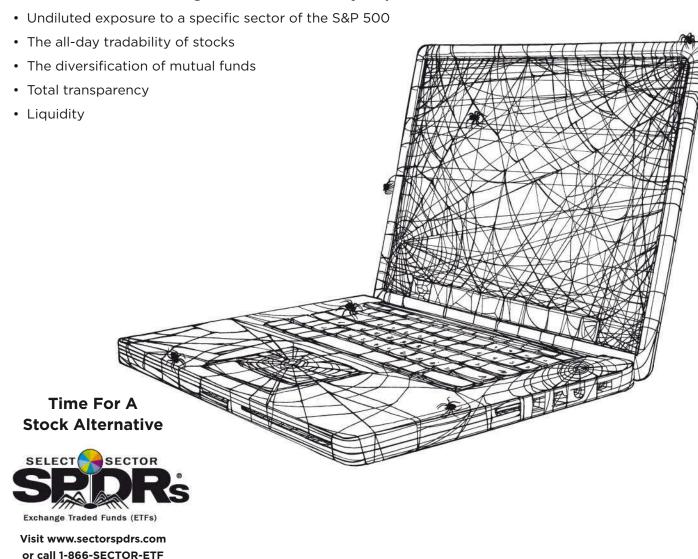
ARGENTINA SNUBS ITS CREDITORS

FATHER VS. DAUGHTER

BLACKROCK VS. BLACKSTONE

WHY BUY A SINGLE STOCK WHEN YOU CAN INVEST IN THE ENTIRE SECTOR?

Potential benefits of adding Sector SPDR ETFs to your portfolio include:



An investor should consider investment objectives, risks, charges and expenses carefully before investing. To obtain a prospectus, which contains this and other information, call 1-866-SECTOR-ETF or visit www.sectorspdrs.com. Read the prospectus carefully before investing.

The S&P 500, SPDRs®, and Select Sector SPDRs® are registered trademarks of Standard & Poor's Financial Services LLC. and have been licensed for use. The stocks included in each Select Sector Index were selected by the compilation agent. Their composition and weighting can be expected to differ to that in any similar indexes that are published by S&P. The S&P 500 Index is an unmanaged index of 500 common stocks that is generally considered representative of the U.S. stock market. The index is heavily weighted toward stocks with large market capitalizations and represents approximately two-thirds of the total market value of all domestic common

Technology Sector SPDR ETF

Top Ten Holdings*

XLK - TECHNOLOGY

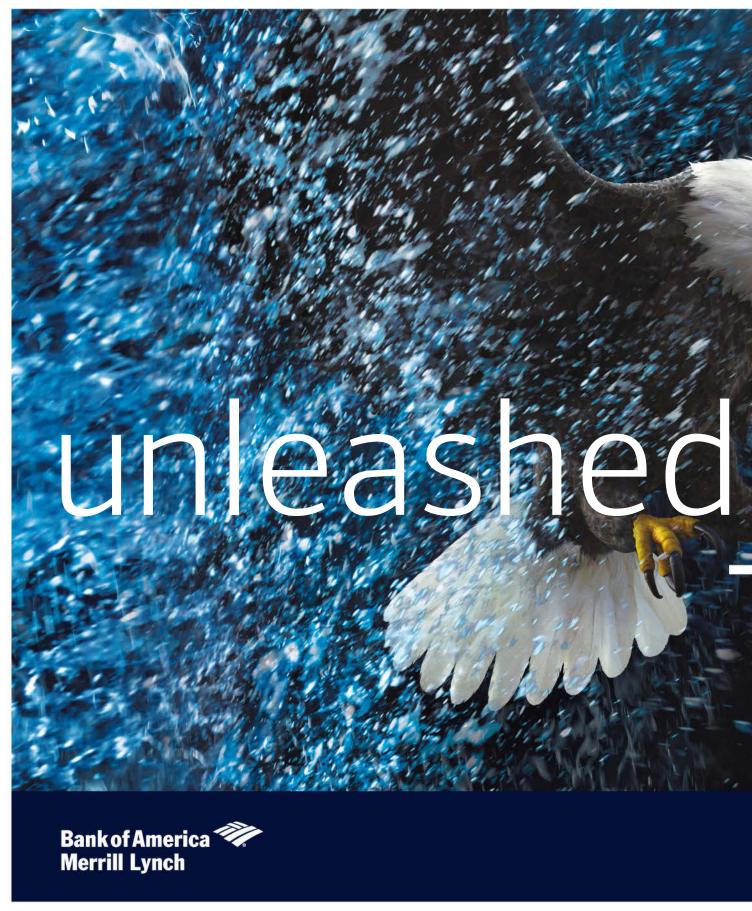
Company Name	Symbol	Weight
Apple	AAPL	18.06%
Microsoft	MSFT	9.15%
Verizon Communications	VZ	4.92%
AT&T	Т	4.27%
Facebook	FB	3.96%
Google A	GOOGL	3.71%
Intl Business Machines	IBM	3.71%
Google C	GOOG	3.63%
Cisco Systems	CSCO	3.56%
Oracle	ORCL	3.34%
	Apple Microsoft Verizon Communications AT&T Facebook Google A Intl Business Machines Google C	Apple AAPL Microsoft MSFT Verizon Communications VZ AT&T T Facebook FB Google A GOOGL Intl Business Machines IBM Google C GOOG Cisco Systems CSCO

* Components and weightings as of 5/31/15. Please see website for daily updates. Holdings subject to change.



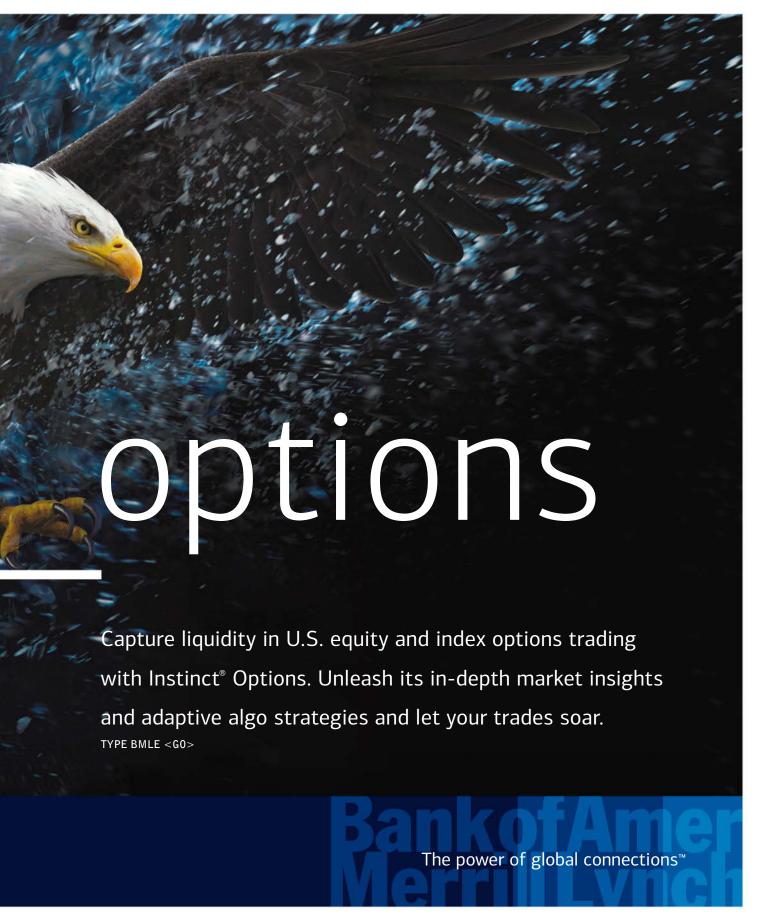
stocks. Investors cannot invest directly in an index. The S&P 500 Index figures do not reflect any fees, expenses or taxes. Ordinary brokerage commissions apply. ETFs are considered transparent because their portfolio holdings are disclosed daily. Liquidity is characterized by a high level of trading activity.

Select Sector SPDRs are subject to risks similar to those of stocks, including those regarding short-selling and margin account maintenance. All ETFs are subject to risk, including possible loss of principal. Funds focusing on a single sector generally experience greater volatility. Diversification does not eliminate the risk of experiencing investment losses.



Options involve risk and are not suitable for all investors. Prior to effecting any option transactions, you should have read and understood the current options risk disclosure document provided by the Options Clearing Corporation. The options risk disclosure document can be requested in writing by contacting your representative or at the following web address: http://optionsclearing.com/about/publications/character-risks.jsp.

"Bank of America Merrill Lynch" is the marketing name for the global banking and global markets businesses of Bank of America Corporation. Lending, derivatives and other commercial banking activities are performed globally by banking affiliates of Bank of America Corporation, including Bank of America, N.A., member FDIC. Securities, strategic advisory, and other investment banking activities are



performed globally by investment banking affiliates of Bank of America Corporation ("Investment Banking Affiliates"), including, in the United States, Merrill Lynch, Pierce, Fenner & Smith Incorporated and Merrill Lynch Professional Clearing Corp., both of which are registered as broker-dealers and members of SIPC, and, in other jurisdictions, by locally registered entities. Merrill Lynch, Pierce, Fenner & Smith Incorporated and Merrill Lynch Professional Clearing Corp. are registered as futures commission merchants with the CFTC and are members of the NFA. Investment products offered by Investment Banking Affiliates: Are Not FDIC Insured • May Lose Value • Are Not Bank Guaranteed. BANK OF AMERICA MERRILL LYNCH® and INSTINCT® are trademarks of Bank of America Corporation, registered in the U.S. and other countries. THE POWER OF GLOBAL CONNECTIONS is a trademark of Bank of America Corporation.



Introducing the all-new 2016 Mercedes-Maybach S 600.

An icon of power, and the pinnacle of prestige. The 2016 Mercedes-Maybach S 600. Its spacious interior—wrapped almost entirely in hand-stitched Nappa leather—is home to reclining rear seats with a hot stone massage feature, exclusive fragrance options and no fewer than 24 high-performance Burmester® speakers, for an acoustic experience you have to hear to believe. It's the new definition of modern luxury from Mercedes-Benz.

MAYBACH







Saudi Arabia is now open to international investors.

You need an intelligent partner who understands Saudi Arabia and has a track record of award-winning services. FALCOM's investment decision making tools, in-depth local market insights combined with cutting edge market access platforms makes FALCOM Financial Services your gateway to the Saudi Arabian market.



ASSET MANAGEMENT I LOCAL AND INTERNATIONAL BROKERAGE I INVESTMENT BANKING I PRIVATE EQUITY

+96612114773 www.FALCOM.com.sa



INTELLIGENT INVESTMENT IDEAS

GLOVES

MARKETS ARE BUILT ON COMPETITION. Global finance pits country against country, company against company, investment against investment, idea against idea. Above all, the commotion of the marketplace is about people mixing it up with other people. Traders take on traders, CEOs vie with CEOs, finance ministers squabble with finance ministers. Rivalry, in short, is at the heart of everything we cover at *Bloomberg Markets*, and it's the subject of this special issue. ¶Rivalry can be respectful and rational, or it can be heated and petty. It is rarely

quiet. And it is usually consequential. The war of words between Greek Finance Minister Yanis Varoufakis and his German counterpart, Wolfgang Schäuble, is not just about the ability of one relatively small country to pay its debts; it's about the cohesion of the European Union and the future of its single currency ("It's Personal," page 18). The stra-

OFF

tegic clash between Goldman Sachs's Lloyd Blankfein and Morgan Stanley's James Gorman epitomizes the struggle by banks to make money in an era of heavy regulation and low returns ("Diverging Paths," page 40). ¶ Indian Prime Minister Narendra Modi and Chinese President Xi Jinping may express great admiration for each other, but their massive countries—with 40 percent of the world's population—are locked in a battle for economic dominance, and India is gaining ground ("Crouching Tiger, Slowing Dragon," page 30). Whoever wins the competition to follow Warren Buffett at Berkshire Hathaway will help shape the legacy of the world's greatest investor ("Who Will Succeed Warren Buffett as CEO of Berkshire Hathaway?" page 94). ¶ Rivalry can ebb and flow. Auction houses Sotheby's and Christie's, caught up in a price-rigging scheme in the 1990s, have intensified their jousting under new leaders ("The Art of Competition," page 100). Blackstone's Steve Schwarzman and BlackRock's Larry Fink, partners until they fell out two decades ago, are now beginning to steer their investing leviathans into each other's territory ("Carving Up the Universe." page 54). ¶ Rivalry can be a family matter. Brothers Doug and Dave Lawler, who once teamed up to wrestle a 9-foot alligator, now find themselves CEOs of competing energy companies ("The Shale Brothers," page 86). In Japan, a fatherdaughter feud at a furniture retailer is transfixing the country as it contends with an aging population ("The Father Who Couldn't Let Go," page 92). ¶ At its most fundamental, rivalry is about one's sense of worth. One-time bond king Bill Gross is striving to measure up to the accomplishments of his younger self ("Gross vs. Gross," page 60). Rivalry can be motivated by noble impulses: a desire to excel, to soar, to engage, to triumph. It can also be triggered by the less lofty emotions of greed, fear, and ambition. Asked to explain his competitive drive, Gross says simply, "I just wanted to run money and be famous."

EXECUTIVE EDITOR

14 Story Time

Why we all love rivalries By Matt Levine

ECONOMIES

18 It's Personal

Greece's Yanis Varoufakis and Germany's Wolfgang Schäuble clash over Europe's future. By Edward Robinson

26 Krugman Battles the Austerians

The Nobel Prize winner tangles with his many foes—in a 16-bit video game. By Jeremy Kahn

28 Putin Defies All

The Russian president, stung by sanctions, fights back. By Stephanie Baker

30 Crouching Tiger, Slowing Dragon

India is gaining ground, while China pauses and reboots. By Yoolim Lee and William Mellor

34 Banking Spat

The AIIB is a boon for Xi and a headache for Obama. By William Mellor

36 **¡No!**

Why Argentina consistently, and unapologetically, snubs its creditors By Michael Smith







BANKING

40 **Diverging Paths**

The CEOs of Goldman Sachs and Morgan Stanley set off in different directions. By Michael J. Moore

44 Swiss Tiff

Two giant banks vie to manage the world's wealth. By Elena Logutenkova and Jeffrey Vögeli

46 Who's the Best CEO in Banking?

In this tournament bracket, the last man standing wins. By Hugh Son and Michael J. Moore

48 Stuck in the Middle

Wall Street says it wants to promote women, but the numbers tell a different story. By Laura Colby

52 The Fittest Men on Wall Street

Two hypercompetitive contenders dominate a grueling decathlon. By Joel Weber

FROM LEFT: EDWARD KINSELLA; DANIEL ACKER/BLOOMBERG; JORDAN HOLLENDER

MANAGING MONEY

54 Carving Up the Universe

Blackstone and BlackRock are getting into each other's business. By Jason Kelly and Katherine Burton

58 **Icahnography**

Activist investor Carl Icahn aims his wit, wisdom, and vitriol in all directions. By Katrina Brooker

60 Gross vs. Gross

The one-time Pimco bond king, now at Janus, reflects on his current status and his younger self. By Mary Childs

62 Rumble in Robo-land

Vanguard and Fidelity are picking sides as algorithms duel for investors. By Margaret Collins







TRADING

64 "We Assume the Bad Thing Has Already Happened"

Data storage company EMC is on the front lines in the fight against hackers. By Michael Riley

68 The S&P 500's P/E Is 19. Or Is It 27?

It depends on whom you ask. By Michael P. Regan

70 And Then There Were Two

How exchanges ICE and CME acquired their way to prominence—a drawn-out drama By John Lippert

72 Trading in the Dark

A new consortium is roiling the waters of Europe's dark pools. By Jeremy Kahn

74 Let's Hear It for the Sales Prevention Team!

Compliance departments are booming. Is that bad for the economy? By Anthony Effinger

80 Taking on the Ratings Triopoly

Former private eye Jules Kroll finds breaking into an entrenched industry harder than sleuthing. By David Evans

82 The Harvard-Stanford Money Race

For the first time in years, the Ivy tops the Tree.

86 The Shale Brothers

Doug and Dave Lawler, CEOs at rival firms, tackle oil, alligators—and each other. By Bradley Olson

90 Mapping a Fuel Feud

How Saudi Arabia's vast and cheap Ghawar field threatens America's Bakken By Anthony Effinger

92 The Father Who Couldn't Let Go

A wrenching corporate succession dispute in Japan pits parent against daughter. By Jason Clenfield

94 **Oddsmaking in Omaha**

Assessing the front-runners in the contest to succeed Warren Buffett By Noah Buhayar and Joel Weber

96 **Mine Games**

Glencore's Ivan Glasenberg takes on Rio Tinto's Sam Walsh—and an entire industry. By Jeremy Kahn

98 Game On

The English Premier League's only female owner challenges the big boys. By Danielle Rossingh and David de Jong

100 The Art of Competition

With new CEOs, Christie's and Sotheby's reignite their longtime enmity. By Stephanie Baker and Katya Kazakina

102 Feuding Is Always in Fashion

Italian fashionistas aren't shy about expressing their feelings—especially toward each other. By Andrew Roberts





STRATEGIES

106 **PROFILE**

Seeking Asymmetrical Opportunities by Jon Asmundsson

108 CHEAT SHEET

Emerging Markets

109 ETFs

How to Understand What's Driving a Smart-Beta Fund BY NICK BATURIN AND JOSHUA LITWACK

EOUITIES

Brazil's Silver Lining: Exports BY ROGER OEY AND GASPARD MONNOYER

GET OUR iPAD APP. Download at MKTS <Go> or bit.ly/bbmarkets.

Bloomberg

EXECUTIVE EDITOR Ronald Henkoff

MANAGING EDITOR Dan Ferrara

CREATIVE DIRECTOR

Siung Tjia

SENIOR EDITORS

Robert S. Dieterich

William Hawley Stryker McGuire (London)

Gail Connor Roche

Joel Weber

STRATEGIES EDITOR Jon Asmundsson

SENIOR WRITERS

Stephanie Baker (London) Katrina Brooker

Anthony Effinger (Portland)

David Evans (Los Angeles)

Jeremy Kahn (London)

Yoolim Lee (Singapore)

John Lippert (Chicago)

William Mellor (Sydney)

Edward Robinson (London) Michael Smith (Rio de Janeiro)

DESIGN AND PHOTOGRAPHY

Lou Vega (Senior Art Director) John Genzo (Managing Art Director)

Lily Chow (Graphics Director)

Lauren Winfield (Deputy Photo Editor, London)

Manuela Oprea (Photo Editor)

COPY EDITORS

EDITORIAL ADMINISTRATOR Missy Levy

Nicole Dekle Collins Joyce L. Kehl

FOUNDER, BLOOMBERG LP Michael R. Bloomberg

CHAIRMAN

Peter T. Grauer

PUBLISHER Michael Dukmeiian 212-617-2653

ADVERTISING SALES DIRECTOR.

Chris Kurtz 212-617-3087

ADVERTISING SALES DIRECTOR, APAC Patrick Brownlow 65-6231-3486

FINANCIAL DIRECTOR

John Maresca IIS SALES

Ted Dolan 212-617-2182

WEST COAST SALES DIRECTOR

Rich Fimbres 323-782-4249 MIDWEST SALES DIRECTOR

Paul Kissane 312-443-5924

TEXAS SALES

Carol Orr 214-521-6116

LATIN AMERICA SALES DIRECTOR Patricia Medici 305-579-4334

CONSUMER MARKETING DIRECTOR Johnna Ayres

CONSUMER MARKETING MANAGER

Daniel Murphy

OPERATIONS/PRODUCTION Melvin Arriaza

James Delahanty

Debra Foley

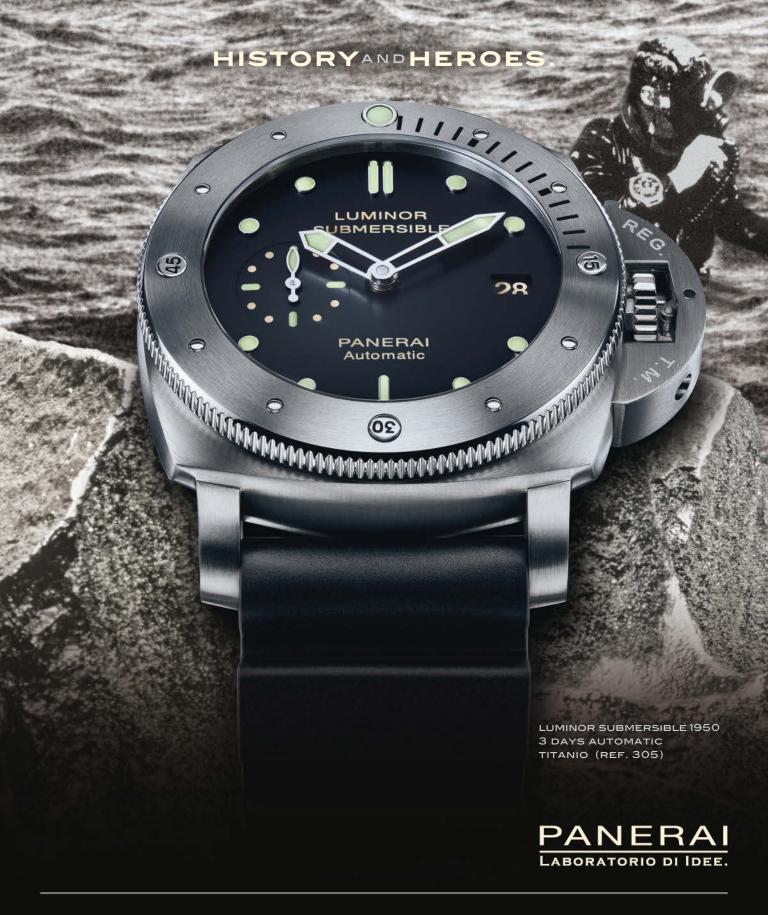
Steven J. McCarthy

Bernie Schraml

A BPA INTERNATIONAL BUSINESS PUBLICATION

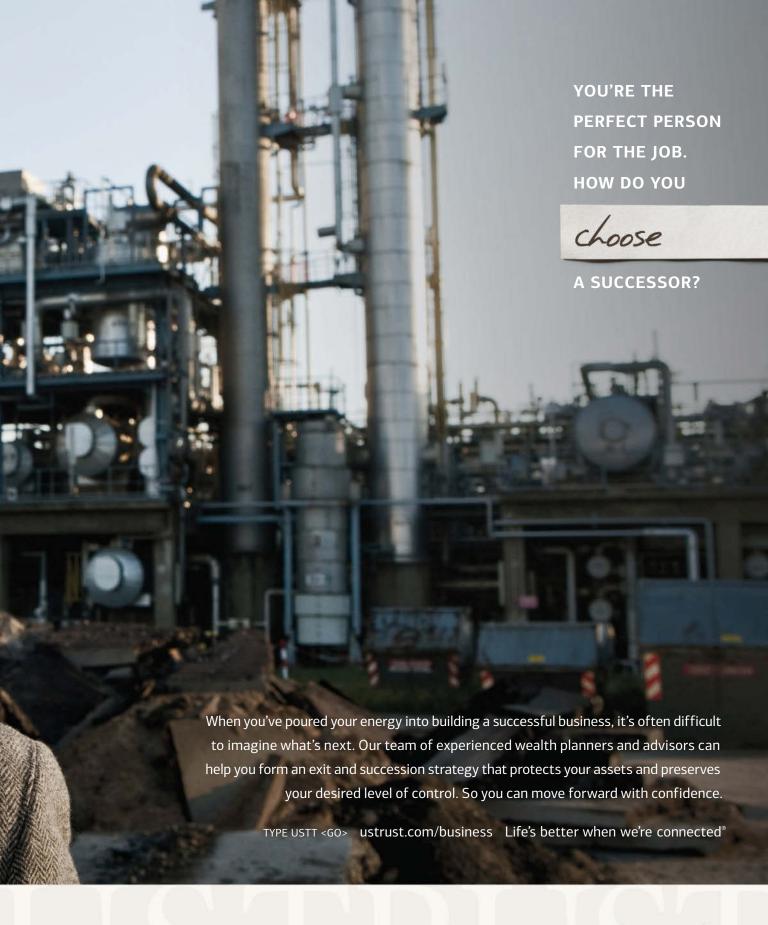
Advertising inquiries:

212-617-3087



Exclusively at Panerai boutiques and select authorized watch specialists.







STORY TIME

BY MATT LEVINE

WHY WE ALL LOVE RIVALRIES

A lot of the story of modern finance is that it keeps getting more boring. Finance looks like, and wants to be, a very rational activity. There's a thing that you want to maximize—usually it's money—and you go measure it and figure out how to maximize it. And the world being what it is, we keep getting better tools to measure and math to maximize. So the trend, as in much of modern life, is toward more science and less instinct. ¶ Investors once sought out star mutual fund managers for their wisdom and folksiness. Now they index. Actual human traders once roamed the floor of the stock exchanges, shouting and gesturing and eating cheeseburgers for breakfast. Now computers do the same work faster and more efficiently. Bank CEOs once fought to dominate every business. Now they have scaled back their ambitions, focusing on what they're good at and just trying not to pay too many fines. Everywhere, freewheeling gut instinct and personal charisma are losing out to boring rational calculation. ¶ But when you look around, this trend is easy to miss. Somehow, despite the long-term evolution toward rationality, the big personal dramas don't go away. The televisions are still full of shouting, even though the exchange floors in the background are quieter. The financial markets still harbor a lot of larger-than-life personalities, clashing in intense rivalries that don't always look that rational. Those clashes remain, and retain their fascination, even against a background of rising rationality. They make it hard to see that background. Why? Part of it is that the drive to drain the drama from much of finance ends up concentrating it in a few swampy pockets where big personalities and fierce fights thrive. So passive investing has been an enormous success for ordinary investors. But index funds tend to be a little too, um, passive toward corporate managers. Funds that invest in every company may not keep the sharpest eye on the people managing each of them—which creates opportunities for noisy activist hedge fund managers and short sellers to swoop in. Many of our fiercest business rivalries—Trian versus DuPont, Carl Icahn versus Dell, Bill Ackman versus

a much smaller fund at Janus, made up largely of his own money. His new project seems to be less about building a business than about protecting and redeeming his legacy. Because while the numbers are indisputable, the fight over what they mean is undecidable. Was Gross brilliant for decades and unlucky at the end? Was he lucky for decades and a failure at the end? Were his skills suited for one market environment but ultimately obsolete? None of these questions can be answered by one more year of performance data—and yet somehow they sound like they could be. So he will press on, accumulating per-

Rivalries in business, as in sports (and role-playing games), are a way to impose narratives on numbers, to render the abstract language of profits and percentage moves in human stories with vivid characters and exciting stakes. But in business—arguably unlike sports—the bare facts might matter more than the stories built on top of them. The numbers aren't generated by a game. They affect lives: BlackRock and Blackstone manage billions in pension and retirement funds; bank CEOs are stewards of institutions that were at the heart of a global financial crisis; Yanis Varoufakis and Wolfgang Schäuble hold the economic fates of millions of Greeks in their hands.

The drive to drain the drama from finance ends up concentrating it in a few swampy pockets where big personalities and fierce fights thrive.

Herbalife, Icahn versus Ackman—involve activists and short sellers who make their homes where markets are less rational.

Even the abundance of data hasn't done much to get rid of personal rivalries. In some ways, this is odd. More than most human activities, finance lends itself to measurement, and measurement on one axis: money. You don't need to argue over which hedge fund manager or bank CEO or mutual fund style is the best. You can just look at performance. Whoever has the highest number wins.

But it doesn't work that way. Look at performance numbers, sure, but for how long? How can you tell that a manager made money sustainably, as opposed to by taking on excessive risk that will blow up in the future? How can you distinguish skill from luck?

So Bill Gross is by most measures an incredibly successful bond manager. But not by all measures! He had a great run of outperformance but then faltered in the last few years before he left Pimco to run

formance data, hoping that it will mean something.

In a way, the situation is reminiscent of rivalries in sports. Sports produce winners and losers and statistics. If you want to know whether your team is better than its rival, you can just look at the standings. But no one thinks that way. The outcome of a game always feels, at least to fans of the losing team, contingent. Sure, your team may be in last place, but the other guys got lucky, or cheated, or in any case did not demonstrate the same depth of character and strength of story line as your guys.

There's an xkcd cartoon in which one newscaster says to another:

A weighted random number generator just produced a new batch of numbers.

And the second newscaster says: *Let's use them to build narratives!*

The caption is "All sports commentary." The mouse-over caption is: "Also, all financial analysis. And, more directly, D&D."

But that just makes us want the human stories even more. We want them because they impose a narrative on a world that feels cold and bewildering, a world that might be rational according to a mathematical proof but that doesn't always feel rational. Computerized trading is fast and cheap and logical, but it leaves ordinary people feeling alienated from financial markets that they think are rigged against them. Banks are paring risk businesses and rationalizing incentive structures, but they keep pleading guilty to crimes. Markets are efficient, we're told, but they often seem to be efficient at a level just beyond human intuition.

Rivalries make for entertaining stories, but they also make for reassuring stories. We can all recognize Bill Gross's quest for redemption, or a bank CEO's desire to exorcise the demons of the financial crisis, or Schäuble's and Varoufakis's starkly different perspectives on the Greek crisis. While much of the financial world becomes increasingly rational, but also increasingly inhuman and alienating, these stories remind us that the financial system is ultimately a creation of human beings trying to do the best they can. And they let us hope that those people are still in control of the system.

16 BLOOMBERG MARKETS JULY/AUGUST 2015

ILLUSTRATION BY **KYLE WEBSTER**



ECONOMISTS JOHN KENNETH GALBRAITH AND MILTON FRIEDMAN

'Galbraith's elegant prose, width of thought, and worldview were always going to clash with Friedman's aggressive and narrow puritanical capitalism. Galbraith's withering assessment of his rival remains the ultimate verbal coup de grâce: "Milton's misfortune is that his policies have been tried."'

SATYAJIT DAS, RISK CONSULTANT AND AUTHOR OF TRADERS, GUNS & MONEY



PowerShares QQQ

- Invests in 100 of the world's most innovative companies
- Provides visibility of holdings throughout the day
- Established 15-year track record

powershares[®]

PowerShares QQQ was incepted on March 10, 1999 and is based on the Nasdaq-100 Index.® The Index includes 100 of the largest domestic and international nonfinancial companies listed on the Nasdaq Stock Market based on market capitalization.

There are risks involved with investing in Exchange-Traded Funds (ETFs) including possible loss of money. The funds are not actively managed and are subject to risks similar to stocks, including those related to short selling and margin maintenance. Ordinary brokerage commissions apply.

Shares are not FDIC insured, may lose value and have no bank guarantee.

Shares are not individually redeemable and owners of the shares may acquire those shares from the Funds and tender those shares for redemption to the funds in Creation Unit aggregations only, typically consisting of 50,000 shares.

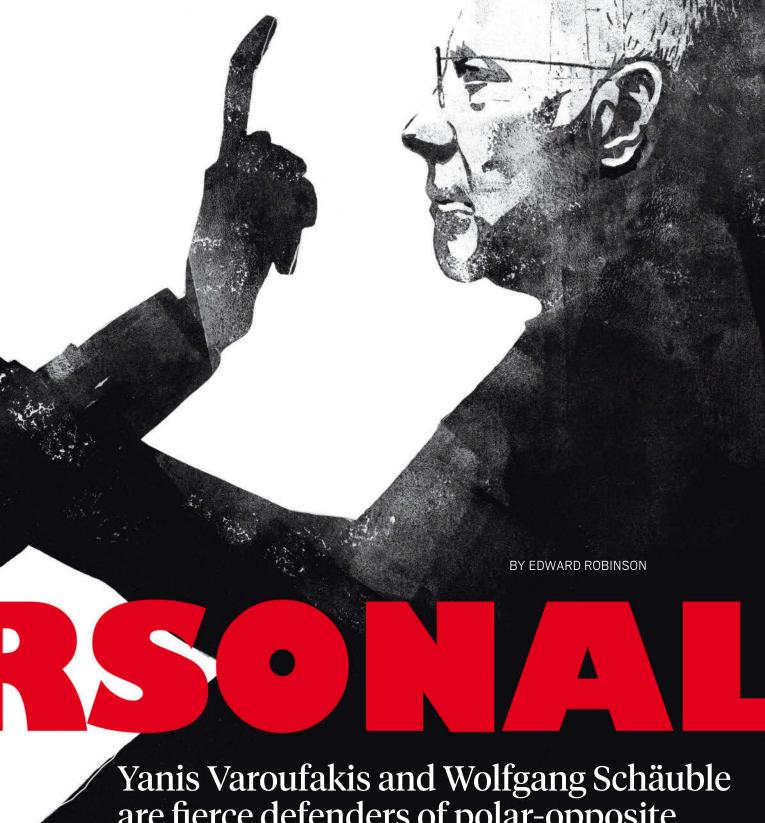
ALPS Distributors, Inc. is the distributor for PowerShares QQQ which is a unit investment trust. Invesco PowerShares Capital Management LLC is not affiliated with ALPS Distributors, Inc.

An investor should consider the Fund's Investment objective, risks, charges and expenses carefully before investing. To obtain a prospectus, which contains this and other information about the QQQ, a unit investment trust, please contact your broker, call 800.983.0903 or visit www.invescopowershares.com. Please read the prospectus carefully before investing.

TYPE POWE <GO>

[EUROPEAN DISUNION]

ILLUSTRATION BY **JEFFREY ALAN LOVE**



Yanis Varoufakis and Wolfgang Schäuble are fierce defenders of polar-opposite economic views. How their struggle ends will shape the future of Europe.

ANIS VAROUFAKIS PUSHES away from his desk and strides across his office overlooking Syntagma Square in the heart of Athens. Dressed entirely in black, Varoufakis looks more like a hit man in a Quentin Tarantino movie than the finance minister of Greece. On this spring afternoon, the economist is spoiling for a

In 72 hours, Varoufakis is going to face Wolfgang Schäuble, Germany's finance chief, and 17 other ministers who constitute the Eurogroup. They've been pressing Greece to slash public spending, privatize its biggest port, and collect more taxes from its citizens in exchange for disbursements from €240 billion in bailout loans. But the combative leftist government led since January by Prime Minister Alexis Tsipras promised Greeks it would end austerity, so it's up to Varoufakis to negotiate a new agreement to receive the final, €7.2 billion tranche.

As Varoufakis holds forth from his sofa on the forces at work in this latest episode of Greece's debt epic, it's clear he's not going to give in to Schäuble. He decries the austerity program as a charade that's plunged Greece into its own version of the Great Depression, with a 25 percent unemployment rate and an economy that's contracted by

On a terrace at their former apartment in Athens across from the Acropolis, Varoufakis poses playfully with his wife, Danae Stratou, an artist. a quarter since 2010. And he refuses to sanction more painful cuts that hurt ordinary people and leave shipping tycoons and bankers unscathed.

Instead, Varoufakis wants a new deal for Greece, one predicated on stimulating the economy. To get that, he's prepared a shortlist of changes Greece can live with, such as posting a budget surplus of 1 to 2 percent instead of the 4.5 percent target sought by its creditors. "This place is in serious need of reform; there's no doubt about that," says Varoufakis, 54, a sinewy, bullet-headed man with deep-set eyes. "To expect an economy that has shrunk so badly, where there is no credit and no investment, to expect it to produce such a surplus is madness; it's complete madness. It's like condemning us to die."

Three days later, it's Varoufakis who's left beaten. In a closed-door meeting at the National Library of Latvia in Riga, Schäuble and the rest of the Eurogroup reject his proposal. Several ministers are so infuriated by Varoufakis's stubbornness, according to people present, that they take turns insulting him: "amateur," "time waster,"

Schäuble, 72, says nothing. He doesn't have to: He's the most influential minister at the table, thanks to Germany's economic might. His ruddy face is an impassive mask that betrays no hint of schadenfreude at his rival's comeuppance. He's long taken a hard line on Athens's inability to clean up its wasteful political institutions. In 2012, he mulled ousting Greece from the euro zone

in a conversation with Timothy F. Geithner, then the U.S. secretary of the Treasury, who shared the anecdote in his 2014 memoir, Stress Test. The week before the Riga confab, Schäuble spoke sternly about the importance of nations fulfilling their obligations. "In Europe, we have good reason not to provide financial assistance without demanding something in return," he said at a symposium at the Brookings Institution in Washington. "And we do not provide it if a country does not use it to help itself." (Schäuble declined to be interviewed for this article.)

The rumble in Riga looks like a stinging defeat for Varoufakis, although he denies he was insulted. "My fellow ministers never, ever addressed me in anything other than collegial, polite, respectful terms," he would write weeks later on his blog. In any event, on April 27, Tsipras appoints Deputy Foreign Minister Euclid Tsakalotos to take over dayto-day negotiations with the Eurogroup and Greece's creditors. But Tsipras doesn't sack his old friend and economics tutor. He shifts him into a supervisory role in the talks with Brussels. Varoufakis has survived to fight another day.

CHÄUBLE AND VAROUFAKIS may have shared the stage for only five months, but they've become archrivals in the battle of ideas that's shaping the euro zone's response to the worst crisis in its 16year history. One man is a self-styled "erratic Marxist" who's spent his career in the academy teaching economics and game theory. The other is a lawyer and stalwart of the conservative Christian Democratic Union who's logged 40 years of lawmaking in the Bundestag, Germany's parliament. Varoufakis has won praise from economists such as Joseph Stiglitz for his penetrating critiques of the euro area's flaws. Schäuble helped form the 19-member monetary union.

Their contest is rooted in a question that was left unanswered when the single currency went live on Jan. 1, 1999: What's the plan if and when one of its members is about to go bust? In the case of Greece, Varoufakis argues, the troika—the European Commission, the European Central Bank, and the International Monetary Fund—have been making it up as they go along. He says selling the port of Piraeus to the Chinese or slashing state workers' pensions won't save his country or, for that matter, the euro area. What's needed, he says, is a redesign making it easier for rich nations such as Germany to channel "idle savings" into investments in



poorer countries like Greece. "This is not a technical problem; it's an architectural problem," Varoufakis says. "And the current architecture can't last."

Schäuble counters that the situation isn't really that complicated. The minister, who finally achieved his long-sought dream of erasing Germany's budget deficit with a "black zero" last year, says living within one's means is the true source of prosperity. Spain's economy, though still beset by high unemployment, is now outperforming France's and Germany's after cutting state spending and loosening hiring rules to make its companies more competitive; Portugal and Ireland have also notched positive results. "The countries that have implemented real reforms are starting to see their efforts bear real fruit," Schäuble said at Brookings. "Structural reforms aren't just about making labor markets more flexible. Our reforms are to improve education and training, streamline administration, and make a more efficient judicial system. The weakness of institutional frameworks is the main reason for insufficient growth."

Each man's position says a lot about where he comes from. Schäuble exemplifies the German ideal that rules-based governance is the foundation for the euro zone's legitimacy, says Daniela Schwarzer, director of the Europe Program at the German Marshall Fund of the United States, a Berlin-based think tank. Rulemaking is so fundamental to Schäuble that he staffed his ministry with more attorneys than economists.

In Greece, a country where merchants routinely make sales off the books to avoid paying value-added taxes, rules are largely meant to be broken, laments Harry Theocharis, a member of the Hellenic Parliament and a former head of the nation's tax collection agency. Dwelling in a land where laws change with regular randomness, Greeks tend to improvise their way through their financial lives. For Varoufakis, tearing up Greece's austerity program isn't an act of insubordination; it's a form of creative destruction that can yield a fairer plan for reviving his country. "That's the fundamental conflict between Greece and Germany," says Schwarzer, a German political economist. "We say this is a rules-based arrangement, and if someone breaks them, that is not a base we can work on."

The clash has become emotionally raw for two countries whose relations have been tense ever since Germany occupied Greece during World War II. German tabloids have run headlines such as "Sell your islands, you bankrupt Greeks ... And the Acropolis,



too!" Greek papers have fired back—in one instance caricaturing Schäuble in a Nazi uniform.

Ordinary Greeks praise Varoufakis for standing up to Schäuble. "He's a patriot," says Emmanouil Karagiorgos, 42, the owner of a Greek restaurant in Berlin. The German, in turn, has won plaudits from his own countrymen for playing it cool with Varoufakis. "Schäuble hasn't lost his temper," says Carl Graf von Hohenthal, a former deputy editor-in-chief of *Die Welt*, one of the country's largest dailies. "He's an old fox."

As *Bloomberg Markets* went to press in early June, Tsipras and Varoufakis weren't just fighting with Schäuble and Greece's other creditors. They were also sparring with their own allies within their party, Syriza, as the deadline for paying back €1.5 billion (\$1.7 billion) in IMF loans neared. Syriza's hard-left faction was balking at any compromise the pair might make on raising taxes or cutting pensions for state workers. As the prospects the nation would default and perhaps exit the euro zone increased, investors pushed up yields on Greek 10-year bonds 50 basis points, to 11.4 percent, as the benchmark stock index plunged 5.6 percent.

Even if Varoufakis does make a last-minute deal to fend off default, the respite will not last long. A wall of debt is rapidly approaching Athens. As of June 1, the nation's total liabilities stood at €328 billion, or 174 percent of GDP—almost double the 90 percent average in the euro area. Within just a few months, Greece must scrape together €8.2 billion to pay down loans issued by the Frankfurt-based ECB and the IMF and another €514 million for bondholders. To stay afloat, the Tsipras-led government will have

As a politician and finance minister, **Wolfgang Schäuble** has been guided by his vision of a Europe unified and at peace.

to seek a third loan package—this one for €30 billion—according to Eurasia Group, a New York-based research firm. Then the cycle of crisis will begin anew.

"It's questionable just how much an outsider should come into countries and explain how they should reform themselves," says Charles Dumas, chairman of Lombard Street Research in London. "It's at the heart of the whole business of the euro zone. You've got different cultures and languages and politics shoved into a blender—and basically they are being told they have to be like Germany."

N A BALMY APRIL EVEning in Athens, commuters are hurrying to their buses around Syntagma Square as tourists admire the neoclassical facade of the Hellenic Parliament building on its eastern flank. Three years ago, this plaza exploded in plumes of tear gas when scores of rock-throwing Greeks clashed with police and demanded an end to the austerity program that was upending their lives. Graffiti blaring "IMF Get Out!" and "Smash the Troika" soon marred ancient city walls. The calm on this spring day belies the nightmarish fears of investors and lawmakers around the world bracing for a Lehman-caliber meltdown should Greece crash out of the single currency.

Varoufakis approaches the entrance to the Hotel Grande Bretagne on the square's northeast corner arm in arm with his wife, artist Danae Stratou. The glamorous couple, profiled in the pages of *Paris Match* earlier this year, greet well-wishers with hugs and kisses amid the flashes of news cameras. The finance minister makes his way through the ornate lobby and into a ballroom filled to standing capacity with hundreds of Greek bankers. In a somber speech, Varoufakis notes the mounting nonperforming loans on their books. Many in the audience hold their smartphones over their heads and capture video of Varoufakis, just like kids at a pop concert.

Varoufakis is a rare combination of scholarship and rock 'n' roll. He's constantly invoking "deflationary spirals" and "animal spirits" and "macroparasitic behavior" in his running narrative on Greece's economic

changes at conferences, in press interviews, and in meetings with his counterparts. He's proposed converting the ECB's term loans to Greece into bonds that are indexed to economic output. That way, the better the nation's economy performs, the more debt it can pay down. And he's suggested that the ECB could kick-start the Greek economy by purchasing bonds issued by the European Investment Bank, a Luxembourg-based institution that loans about €77 billion annually to transportation projects, alternative energy ventures, and small and mediumsized businesses. The EIB could invest the proceeds in promising Greek enterprises, which would bolster income and help businesses pay down debts to the

and while I may think he's right, that's not the job of a finance minister."

Varoufakis shrugs off such criticism. "This accusation that I lecture at people—what that really means is that I try and talk economics in the Eurogroup, which nobody does," he says. "To imagine that we can sort out our problems simply by taking the next loan tranche and dealing with our liquidity problem for another two months flies in the face of reality."

T'S MARKET DAY IN OFFENBURG, and the aroma of freshly baked bread wafts down the cobblestoned lanes of this town nestled between the Rhine River and the Black Forest in southwestern Germany. Local families, along with French shoppers who've come over from Strasbourg for the day, browse produce stands teeming with strawberries, rhubarb, and white asparagus grown in nearby fields. A butcher hawks bauernwurst, knoblauch salami, and other sausages stacked on his rolling meat wagon. On a Saturday morning in spring, this community of 57,000 exudes a responsible prosperity that seems perfectly in keeping with its most influential resident.

Schäuble, born in the nearby college town of Freiburg, has represented Offenburg in the Bundestag since 1972. When he and his wife, Ingeborg, an economist, stay at their flat in town, he likes to have a dinner of schnitzel and french fries and catch up on local news at the Hotel Sonne, a community hub that dates back to the 14th century. At a wine tasting the hotel hosted recently to showcase local rieslings, Carola Vogt described Schäuble, a friend of her family's, as bodenständig, a man rooted to his native soil. Offenburg, located at Europe's epicenter, has endured three wars since the 19th century. "There is no better place to explain why we need a unified Europe," says Vogt, a tour guide.

That vision of Europe has been Schäuble's lodestar. As West German Chancellor Helmut Kohl's top deputy, he led negotiations to unify West and East Germany in 1990. The same year, a mentally ill man shot Schäuble at a campaign rally, leaving him paralyzed from the chest down. He persevered, succeeded Kohl as chairman of the Christian Democratic Union in 1998, and then won approval of Germany's adoption of the euro in the Bundestag. Schäuble's bid to stand for chancellor himself ended after his

'WE AGREED TO DISAGREE,' SAID SCHÄUBLE. VAROUFAKIS FROWNED. 'WE DIDN'T EVEN AGREE TO DISAGREE FROM WHERE I'M STANDING.' HE SAID.

travails. In his 2011 book, *The Global Minotaur: America, Europe and the Future of the Global Economy*, he traced the origins of the 2008 financial crash all the way back to the Bretton Woods Conference in 1944 and the formation of the IMF and the World Bank. "Most economic models ignore historical context, but Yanis's work is rooted in political and economic history," says James K. Galbraith, a professor of government at the University of Texas at Austin, where Varoufakis taught until December. "He's an academic renegade."

Varoufakis tools around his native Athens on a Yamaha motorcycle and shows up for meetings with the likes of U.K. Chancellor of the Exchequer George Osborne wearing a leather jacket and an untucked electric-blue shirt. He's matched his unconventional wardrobe with a casual disregard for the niceties of diplomacy. After his first talk with Schäuble in February concluded on a sour note, the German said at a post-session news conference in Berlin, "We agreed to disagree." Varoufakis frowned. "We didn't even agree to disagree from where I'm standing," he retorted. Awkward.

European finance ministers tend to stick to a script of platitudes in public while their staffs iron out the technical details of agreements behind closed doors. Not Varoufakis. During the past four months, he's brainstormed a raft of major euro-zone policy country's strapped banks. "It would be foolish not to do this," Stiglitz, a Nobel Prize winner, said at a symposium in Paris in April where Varoufakis described his idea. Greek business leaders agree. "There's been too much focus on austerity," says Alexis Macridis, CEO of Chryssafidis, an industrial parts importer in Athens. "Without growth, we're stuck in a negative feedback loop of high unemployment and no investment."

Schäuble and his peers aren't interested in Varoufakis's scenarios. They want Syriza to carry out the reforms the previous government committed to. Varoufakis may believe it's indefensible to pursue reforms that have caused so much hardship for Greeks. For Schäuble, it's anathema that a euro-area government could tear up such an obligation because it didn't agree with it. As for ordinary Germans, they became fixated on Varoufakis after a video from 2013 surfaced on YouTube showing him giving their country the finger. (Varoufakis said the video had been "doctored.") "Actually, it's not Varoufakis's middle finger that's been the problem; it's this one," says Jens Bastian, a German economist who lives in Athens, wagging his index finger. "He's lecturing,

BLOOMBERG TIPS Grexit Contingency Planning

Euro Resource Center (EURO) is a new function that provides information about Bloomberg's planning for the potential exit of Greece from the single currency. Type **EURO <Go>** on the Bloomberg Professional service. For information about tickers, click on Tickers and Identifiers under FAO on the left side of the screen. JON ASMUNDSSON





Since 2009, **anti-austerity protesters** have gathered frequently outside the Hellenic Parliament in Syntagma Square.

party was embroiled in a scandal involving illegal campaign donations. Angela Merkel replaced him as head of the CDU in 2000, and five years later, she was elected chancellor. "His destiny was not fulfilled," says von Hohenthal, who's now a Berlin-based senior adviser to Brunswick Group, a public relations firm. "She is where he wanted to be."

Merkel and Schäuble are kindred spirits when it comes to the need for reform in the euro area, says the German Marshall Fund's Schwarzer. In 2009, Merkel tapped her former rival as finance minister.

Following reunification, recessionary Germany was branded the "sick man of Europe." Gerhard Schröder, the center-left chancellor from 1998 to 2005, cut unemployment and welfare benefits, reduced state pensions, and made it easier for companies to fire unproductive workers. As the nonwage costs of German labor fell, the nation's high-value exports surged to 46 percent of GDP from 36 percent in the past decade, and the unemployment rate halved to 6.4 percent. "Merkel and Schäuble believe that's the way forward, and that's

why they have been so insistent with other countries," Schwarzer says.

With Greece, a nation still grappling with the volatile legacy of military rule and socialism, they may have been too unyielding. Syriza wouldn't have been elected if the austerity program hadn't been so harsh, says Dimitri Sotiropoulos, a political scientist at the University of Athens. Now, a wave of radical political movements is surging on the Continent, from Podemos, the new leftist party in Spain that made impressive gains in municipal elections in May ahead of a national vote later this year, to Marine Le Pen's right-wing National Front, which has vowed to withdraw France from the euro.

Even in Germany, the politics have become fraught. Unyielding on austerity, Schäuble seems prepared to let Greece exit, while Merkel, reluctant to risk such a momentous move, is willing to compromise with Syriza. Meanwhile, German taxpayers are so done with Greece that even if the chancellor strikes a deal with Tsipras on a loan package this summer, it would be hard to win the Christian Democratic bloc's full support in the Bundestag. "There would be many negative reactions to that from her own party," says Hans-Peter Friedrich, a legislator from

Bavaria and a member of the Christian Social Union, the CDU's sister party. "We've given Greece a lot of opportunities, and they voted for Tsipras and Varoufakis and a government that is not willing to cooperate with other member states. So we should say: 'OK. Go your own way. Leave the euro zone.' We cannot support them for the next 100 years."

If there's one thing Varoufakis and Schäuble agree on, it's that the world's No. 1 monetary union must endure, and that its advantages for the 335 million people living within its borders far outweigh its shortcomings. "The two of us, the Greek finance minister and I, we are both in favor of European integration," Schäuble said at his Feb. 5 news conference with Varoufakis. "We want a strong Europe, a Europe which has clout and stands its ground in the world."

Even if the euro area has to weather Greece's departure, a crucial question will linger: How should Europe deal with unsustainable debt? Varoufakis has proposed a raft of pro-stimulus ideas, while Schäuble has pushed the tonic of austerity-driven reform. What if they're both wrong? "We have given space to political policy arguments and to the questioning of how the euro zone was built, but at this moment, it's difficult to see a forward-looking narrative on where we want to take this union," Schwarzer says.

ACK IN THE FINANCE MINistry in Athens, Varoufakis is musing on yet another idea, what he calls "the commonality of debt." If the euro zone is to be a true monetary union, then why doesn't the ECB issue its own bonds to service the debt of troubled states? "Wasn't it Alexander Hamilton who said, 'A common debt, as long as it's not excessive, is the bond that binds a nation'?" Varoufakis asks.

Close. The first U.S. secretary of the Treasury actually called a common debt a "national blessing." For Schäuble and his fellow Germans, Varoufakis's proposal would surely be anything but that.

With assistance from Nikos Chrysoloras, Brian Parkin, and Maria Petrakis

24 BLOOMBERG MARKETS JULY/AUGUST 2015

ILLUSTRATION BY KYLE WEBSTER



A RIVALRY I LOVE

ALEXANDER HAMILTON AND THOMAS JEFFERSON

'Not only for the clash of so many core values—Federalists and Republicans, urban and rural—but also for how it ended, with Hamilton looking beyond ideology to deeper values and endorsing Jefferson, his enemy, in 1800.'

GEORGE WALKER, CHAIRMAN AND CEO OF NEUBERGER BERMAN



Generates Performance From Precision.



OTWEM. Over-The-Wing Engine Mount is equal parts exacting and artful, a principle that has led to advancements in medicine, technology and life. Now it has led to the world's most advanced light jet.



Since the financial crisis, Nobel Prize—winning economist and New York Times columnist Paul Krugman has devoted no fewer than 74 columns and blog posts to what he calls "austerians" supporters of government budget cuts in response to recession. Any fiscal adjustments most developed economies need are long-term, whereas austerity is short-term. he says. Krugman has also gone after central bankers who were too slow in lowering rates in response to the crisis and then too quick to raise them during the recovery, calling them "sadomonetarists" who enjoy inflicting economic suffering. Krugman has acquired powerful critics on the left and right who accuse him of everything from intellectual dishonesty to political naiveté.



BY JEREMY KAHN

ILLUSTRATIONS BY WALTER NEWTON



Krugman accuses Sweden's Riksbank of "sadomonetarism"—raising rates in 2010 and 2011 at a time when, though the economy was growing, unemployment remained high and inflation low. Doing so, he said, risked turning Sweden—"the rock star of the recovery"—into another Japan, beset by stagnation and deflation. Riksbank Deputy Governor **Per Jansson** asks, "Has he ever had a look at the data?" The central bank, he says, acted in the face of rapidly rising gross domestic product. In the end, the bank was forced into full retreat, slashing rates below zero and buying government bonds to bring down long-term rates and revive inflation.

In London's *Guardian* on Jan. 6, Columbia University professor **Jeffrey Sachs** lambastes Krugman: "Not one of his *New York Times* commentaries in the first half of 2013, when 'austerian' deficit cutting was taking effect, forecast a major reduction in unemployment or that economic growth would recover to brisk rates. ... Yet he now says that everything has turned out just as he predicted." Krugman retorts: "I've just been applying straightforward textbook macro. ... If you think I've been slippery or dishonest, you're almost certainly suffering from a failure of reading comprehension."



In December 2013, Krugman compares U.K. Chancellor of the Exchequer **George Osborne**'s austerity drive to a Three Stooges routine: banging the economy into a wall over and over so everyone feels better when the abuse stops. Roger Bootle, a British economist and columnist for London's *Daily Telegraph*, counters that the markets responded favorably to austerity. What's more, he says, Krugman is being "politically naive:" "A government can only push through unpopular things in the first year or two of its term." Krugman: "Am I politically naive? Maybe, but I'm not sure how this contradicts the economics."

Krugman attacks Germany for running large trade surpluses, particularly with its southern euro-zone neighbors, "hurting growth and employment in the world at large." **Georg Erber** of the German Institute for Economic Research says Krugman is simply wrong. His own research demonstrates that Germany's trade surplus was not the result of government policy; it was mostly due to exports to emerging economies, such as Turkey and India, not southern EU neighbors.



Benn Steil, an economist at the Council on Foreign Relations in New York, accuses Krugman of using misleading data. Examining data Krugman used to show that Iceland, which has an independent monetary policy, outperformed Baltic economies that, as euro-zone members, don't, Steil says Krugman's argument disintegrates if the starting date is moved just three months forward or backward. "He has been very deliberate in his cherry-picking of the data," Steil says. Krugman, who says he selected the fourth quarter of 2007 as a baseline because that's when the U.S. recession started, retorts: "I do two or three blog posts each day. I don't have time to pick cherries!" He alters his approach when he realizes it is "problematic."

Krugman, playing ref as well as combatant, declares himself the victor. In a long April 27 piece in the *Guardian*, he writes, "The austerian ideology that dominated elite discourse five years ago has collapsed." A few days later, the austerians have reason to crow, too: They see the victory of Prime Minister David Cameron's Conservative Party in the May 7 U.K. election as a vindication of Osborne's austerity program.

PUTIN Stung by sanctions, the Russian president fights back with measures of his own. Stung by sanctions, the Russian president fights back with measures of his own.

BY STEPHANIE BAKER

AFTER RUSSIAN PRESIDENT Vladimir Putin annexed Crimea in March 2014 and went on to back separatists in Ukraine, the U.S. and the European Union slapped on sanctions. Putin was scornful, saying the deterrents would have a "boomerang effect." He fought back with bans on Western food imports and on travel to Russia by dozens of European politicians while the economy went into a tailspin. By January, the ruble had lost half of its value. Making matters worse, the price of oil, Russia's main export, sank to an almost-six-year low, further hobbling the economy.

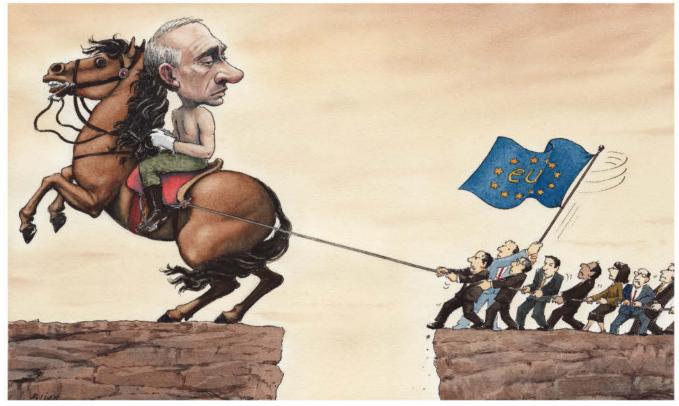
In the standoff, Europe, Russia's biggest trading partner, has suffered only marginally, with 0.4 percent shaved off EU economic growth for 2015, according to a forecast by the European Commission. France suspended a €1.2 billion (\$1.3 billion)

contract with Russia in October, halting delivery of two Mistral-class warships, and German exports to Russia tumbled 18 percent last year, to €29 billion.

Putin has the means to hurt Europe further. EU member states depend on Russia for more than a third of their oil and gas, and Putin, should he choose to escalate what's been dubbed a "new Cold War," could disrupt supplies. It may not come to that. Russia is weathering the sanctions better than some forecasters had expected. The ruble has partially rebounded, and while the International Monetary Fund projected a 3.8 percent drop in the economy for 2015, Russian Finance Minister Anton Siluanov puts the figure at 2.5 percent.

Even so, it's unlikely sanctions will be lifted anytime soon. U.S. President Barack Obama is urging the EU to maintain them, and German Chancellor Angela Merkel agrees.

One of the unintended consequences of sanctions has been Russia's pivot to the east. At Moscow's Victory Day parade on May 9 to mark the 70th anniversary of the end of World War II in Europe, Putin stood shoulder to shoulder with Chinese President Xi Jinping, whose presence was notable because most major world leaders stayed away. Afterward, the two heads of state signed a series of deals that could blunt the effect of sanctions. Xi, for example, pledged to invest \$5.8 billion toward the construction of an 800-kilometer (500-mile) high-speed railway from Moscow east to Kazan in Russian Tatarstan that could be extended to Beijing in the future.



ARE YOU **REWARDED** OR THE RISK YOU TAKE?

 $\star\star\star\star\star$ (WACPX) Western Asset Core Plus Bond Fund

Overall Morningstar Ratings, as of April 30, 2015. The ratings are based on risk-adjusted returns and are derived from a weighted average of the performance figures associated with a fund's 3-, 5- and 10-year (as applicable) rating metrics. 1



Achieved top-decile peer group ranks for 1-, 3-, 5- and 10-year annualized returns.

Morningstar Intermediate-Term Bond Fund Category as of April 30, 2015 — based on total returns.²

See how our team works for you at leggmason.com/westernasset







Awards Morningstar 2014 U.S. Fixed-Income Fund Manager of the Year[†]

[†] Awarded to Ken Leech, Carl Eichstaedt, and Mark Lindbloom for Western Asset Core Bond Fund (WACSX) and Western Asset Core Plus Bond Fund (WAPSX) named Morningstar 2014 U.S. Fixed-Income Manager of the Year, United States of America. Morningstar Awards 2015 © Morningstar, Inc. All rights reserved. Morningstar Fund Manager of the Year award recognizes portfolio managers who demonstrate excellent investment skill and the courage to differ from the consensus to benefit investors. To qualify for the award, managers' funds must have not only posted impressive returns for the year, but the managers also must have a record of delivering outstanding long-term risk-adjusted performance and of aligning their interests with shareholders. The Fund Manager of the Year award winners are chosen based on Morningstar's proprietary research and in-depth evaluation by its fund analysts.

Fixed income securities involve interest rate, credit, inflation and reinvestment risks; and possible loss of principal. As interest rates rise, the value of fixed income securities falls. High-yield securities include greater price volatility, illiquidity and possibility of default. International investments are subject to special risks, including currency fluctuations and social, economic and political uncertainties, which could increase volatility. These risks are magnified in emerging markets. Derivatives, such as options and futures, can be illiquid, may disproportionately increase losses, and have a potentially large impact on fund performance. The use of leverage may increase volatility and possibility of loss. Asset-backed, mortgage-backed or mortgage-related securities are subject to prepayment and extension risks.

Rankings are based on the Class I shares. Other share classes may have different rankings. Past performance is no guarantee of future results.

Before investing, carefully consider a fund's investment objectives, risks, charges and expenses. You can find this and other information in each prospectus, and summary prospectus, if available, at www.leggmason.com/ individualinvestors. Please read the prospectus carefully.

© 2015 Legg Mason Investor Services, LLC, member FINRA, SIPC, Legg Mason Investor Services, LLC and Western Asset Management are subsidiaries of Legg Mason, Inc. ADVR117459 6/15 FN1511934

INVESTMENT PRODUCTS: NOT FDIC INSURED • NO BANK GUARANTEE • MAY LOSE VALUE

- * Source: Morningstar, Inc. As of April 30, 2015.
- Morningstar ratings are as of April 30, 2015 and are subject to change every month. A 4- or 5-star rating does not necessarily imply that a fund achieved positive results for the period. For funds with at least a 3-year history, Morningstar calculates a Morningstar Rating based on a Morningstar Risk-Adjusted Return measure that accounts for variation in a fund's monthly performance (including the effects of sales charges, loads and redemption fees), placing more emphasis on downward variations and rewarding consistent performance. The top 10% of funds in each category receive 5 stars, the next 22.5% receive 4 stars, the next 35% receive 3 stars, the next 22.5% receive 2 stars, and the bottom 10% receive 1 star. (Each share class is counted as a fraction of one fund within this scale and rated separately, which may cause slight variations in the distribution percentages.) Class I and A shares of the Western Asset Core Plus Bond Fund were rated against 926, 805 and 593 Intermediate-Term Bond Funds over the 3-, 5- and 10-year periods, respectively. With respect to these Intermediate-Term Bond Funds, Class I and A shares of the Fund received Morningstar Ratings of 5, 5 and 5 and 3, N/A and N/A stars for the 3-, 5- and 10-year periods, respectively. Other classes may have different performance characteristics. Classes have a common portfolio.
- Morningstar percentile ranks are based on a fund's total returns (including the effects of sales charges, loads and redemption fees) for the specified time period relative to all funds in the same category. The highest (or most favorable) percentile rank is 1 and the lowest (or least favorable) percentile rank is 100. The top-performing fund in a category will always receive a rank of 1. Ranks shown are for Class I and A shares. Class I percentile ranks were 4% (34/1,074 funds) for the 1-year period, 10% (96/1,021 funds) for the 3-year period, 9% (88/961 funds) for the 5-year period and 5% (43/857 funds) for the 10-year period. Class A percentile ranks were 6% (56/1,074 funds) for the 1-year period, 15% (153/1,021 funds) for the 3-year periods and N/A for the 5- and 10-year periods.



CRJUCHING TIGER, SLOWING DRAGON

India is poised to top China in population and economic growth. That doesn't necessarily mean Narendra Modi's pro-business push will beat Xi Jinping's consumption-heavy makeover in a regional contest with global consequences.

BY YOOLIM LEE AND WILLIAM MELLOR

JIM O'NEILL still vividly recalls a 2006 road trip he made from India's capital, New Delhi, to a new industrial city named Gurgaon. On a two-lane road jammed with cars, motorcycles, rickshaws, and animals, it took O'Neill, then chief economist at Goldman Sachs, 2½ hours to travel 30 kilometers. "It was insane," he says. ¶ O'Neill, who's now a British government minister, repeated the journey in February. This time, the drive, on a new highway

ILLUSTRATION BY CHARLES CHAISSON

to what's now more of a suburb, was less than an hour. Even better, the hotel car provided free Wi-Fi-the first time he'd encountered this perk anywhere in the world. "It sort of sums up the changes in India," he says.

Prime Minister Narendra Modi won the nation's biggest election victory in 30 years in May 2014 by insisting India is capable of such advances on a grand scale. He pledged to lift the lumbering democracy—held back by red tape and weakened by corruption into a global superpower with "minimum government, maximum governance." He promised modern cities, improved manufacturing, and 100 million new jobs by 2022. Investors bought into the vision of the country's first overtly business-oriented leader, pouring a record \$42 billion into Indian stocks and bonds last year.

Christopher Wood is a believer. The chief strategist at brokerage CLSA in Hong Kong had more than tripled the percentage of Indian shares in his Asia-Pacific portfolio, which excludes Japan, to 20 percent as of mid-May from just 6 percent in October 2013. Wood's 20 percent also tops the 6.2 percent weighting for India in the benchmark MSCI AC Asia Pacific Index, which also excludes Japan. "India is the most promising story in Asia on a five- to 10-year view," he says. "Mr. Modi is the most pro-business, pro-investment political leader in the world."

That's some statement in a region where China's shadow eclipses India in almost every conceivable way. China is bigger, with 1.37 billion people to India's 1.25 billion. Economic reforms have lifted 500 million Chinese citizens out of poverty since 1978, the World Bank says. In India, 175 million have escaped poverty from 1993 through 2011, the closest comparison the bank offers. Modi, 64, and Chinese President Xi Jinping, 62, are political strongmen who profess mutual respect. But their politics are poles apart. India is the world's largest democracy; China, a totalitarian communist state. And they compete for everything-investment and trade dollars; coal, gas, and oil; and even territory along their 4,000-kilometer (2,485-mile) border.

So far, China has had the upper hand. Its economy and stock market capitalization are each five times those of India, largely the result of then-leader Deng Xiaoping's unlikely embrace of a market economy and foreign

investment in 1978, 13 years before India opened some of its industries to outside investment. "China's reforms were far more comprehensive, and it's already an economic miracle," says Ruchir Sharma, who oversees more than \$25 billion as New York-based head of emerging markets at Morgan Stanley Investment Management. "India is still aspiring to be an economic miracle."

India may be overreaching as it races to catch China. Its statistics ministry in January revised how it calculates gross domestic product and said the economy grew 6.9 percent in the year that ended in March 2014, up from the reported 4.7 percent. Finance Minister Arun Jaitley said a month later that the country can achieve double-digit growth, "wiping every tear from every eye." Sharma, for one, isn't buying the revised numbers, saying they're "just wrong."

As the controversy brews, China may not even be paying attention. "I really don't think China cares about how India is doing because it has moved on," Sharma says. "China's strategic game is much bigger."

Statistics bear out China's global dominance. Since Deng abandoned doctrinaire communism in 1978, growth has surged an average of 9.8 percent annually. Since 2001, China has overtaken Italy, the U.K., France, Germany, and Japan to become the world's second-biggest economy. Its \$10 trillion GDP dwarfs India's \$2 trillion. Not only has China built the world's biggest stockpile of foreign reserves, at \$3.7 trillion; the country also accounts for one-third of the global total and boasts 10 times India's amount. Even O'Neill acknowledges the imbalance: "If India grows by 8 percent for the rest of this decade and China grows by 7 percent, China will still create another three Indias before the decade is over."

The trouble is, China's economy may slow even more sharply than that. Beijing's rulers, who have successfully navigated both regional and global financial crises since Deng declared "to get rich is glorious," are finally stumbling.

One long-running strategy appears to have misfired badly: China's single-child policy has left an aging, diminishing workforce. Labor, once bountiful and cheap, is less plentiful and more expensive. At the same time, the economy has become too dependent on low-priced exports and government spending on infrastructure. While such pump priming has helped China forge ahead-creating highways, railways, and airports India can only dream of-much of it has been wasteful. Today, the home to one-fifth of the world's people is dotted with ghost cities and bridges to nowhere. Corruption and housing bubbles are rife. After China's original capitalist reforms shattered what its people called the "iron rice bowl," the cradle-to-grave welfare system of Mao Zedong's communists, Chinese consumers were too worried about saving to help their nation by spending.

Now, Beijing is belatedly trying to create a more balanced economy driven by consumption and service industries. The transformation hasn't been easy. Last year, growth slipped to 7.4 percent-the lowest rate in 24 years. This year, it will fall to 6.8 percent, the International Monetary Fund estimates. "It's a very bumpy path that's going to produce some very big losers," says Patrick Chovanec, chief strategist at New York-based Silvercrest Asset Management Group, which oversees \$18 billion.

The biggest losers may be investors who've helped Chinese stock markets more than double in the past year. On June 5, the Shanghai Composite Index topped 5,000 for the first time since 2008. India's S&P BSE Sensex Index, by comparison, has risen 15 percent. "The perpetual hope that China will stimulate its economy and prop up growth is misplaced," Chovanec says. "More easy money won't solve China's woes. Only real reform can do that, and that won't be painless."

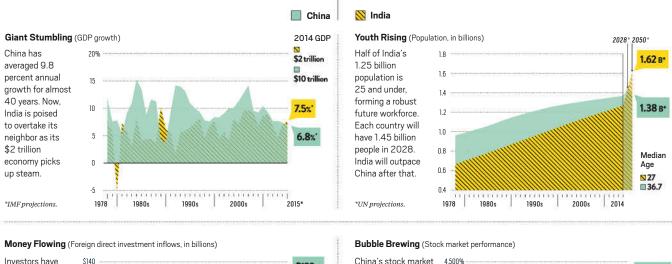
Investors are especially concerned about China's red ink. Total debt quadrupled to \$28 trillion in 2014 from 2007, equivalent to 282 percent of GDP, says Satyajit Das, a risk consultant and author of Extreme Money: Masters of the Universe and the Cult of Risk, his 2011 book that examines how financial maneuvers generate bubbles of fake growth. "China has contributed to around one-third of the total increase in global debt since 2007," he says. Japan in the late 1980s, South Korea in the 1990s, and the U.S. and the U.K. in the early 2000s saw rapid growth in credit, ending in financial crises, he says. "China has experienced a similar or even greater level of expansion in debt," Das says.

Xi, who came to power in 2012, is committed to transforming China while not letting growth slip too far. That includes easing capital controls to make China's currency, the yuan, more convertible and liberalizing interest rates. He wants to create economic corridors that track the ancient Silk

BLOOMBERG TIPS Comparing India and China ETF Flows

You can use the Exchange Traded Funds (ETF) function to track flows into India- and Chinafocused funds. Type ETF <Go>, click on the arrow to the right of Asset Class, and select All. Next, enter INDIA in the GEO FOCUS field and click on the match. This year through June 1, India funds attracted \$3.6 billion. China funds shed \$10.7 billion. JON ASMUNDSSON

Asia's Dueling Duo With 40 percent of the world's people living inside their borders, India's democracy and China's communist regime are jockeying for economic and geopolitical clout.



\$140 Investors have \$123 B poured money into China since the communist state adopted a market economy in 1978. India still lags behind after embarking \$28 B

1990s

20005

five times that of India's after prices doubled on its main Shanghai index in the past year. Some analysts say shares are approaching bubble territory. Index: Dec 31 1990 = 0

*Through June 1. **Value of all shares outstanding

in China and India.

value is more than

3,683% 4.000 Shanghai Composite 3.500 3 000 2,557% 2.500 Total stock 2,000 market 1.500 value* 1,000 m\$9.29 trillion \$1.61 0

Sources: Bloomberg, IMF, United Nations, and CIA World Factbook

40

on its economic

reform in 1991.

Routes linking Asia to Europe. At home, he's arrested 100,000 government officials in an anti-corruption drive. His medium-term aim: to double China's \$7,000-a-year per capita income by 2020.

All of this comes as India is hitting its stride. Its economy will expand by 7.5 percent in 2015, the IMF says, beating China for the first time since 1999. India will likely outpace its rival this decade and possibly for the next 20 years, O'Neill says. O'Neill, who, in 2001, coined the term BRIC to group emerging economies Brazil, Russia, India, and China, suggests that by 2030, India may be No. 3, after China and the U.S. "Under Modi, India's got a better chance of getting closer to its potential than ever since I dreamt up BRIC," he says.

Modi is paving the way for the growth he envisions. He's allowed foreign investment in railways for the first time and raised the foreign ownership limit in the defense and insurance industries to 49 percent from 26 percent. He's scrapped diesel subsidies and pledged to unclog transportation and build cities. Aided by the plunge in oil prices, inflation slowed to 4.87 percent in April from 8.33 percent in May 2014. The currentaccount deficit narrowed to 1.4 percent of GDP at the end of 2014 from 2.6 percent a year earlier. In response, Moody's Investors Service in April raised India's credit outlook to positive from stable.

Modi, like Xi, is tough on corruption. He supported a law that requires prison terms of up to 10 years for those who shift unreported assets abroad. Since last August, Indians have opened more than 132 million bank accounts, which may help curb illegal deposit taking that targets the poor. The government is expanding cash transfers into these accounts so the billions of dollars in subsidies it doles out every year go directly to the 59 percent of Indians who live on less than \$2 a day.

Some big financial reforms have stalled. A uniform goods and services tax to replace local levies and an overhaul of land laws to make property acquisition easier for foreign companies are stuck in parliament. Plans to reduce nonperforming loans at state-owned banks have gone nowhere. "The first year is critical to impose the maximum number of reforms," Morgan Stanley's Sharma says. "What the Modi government has done is good but not great."

One of India's main assets propelling it forward is youth. India's median age is 27. compared with China's 36.7. India's population will exceed China's after 2028. And by 2030, its labor force may increase by 300 million, equal to the current number of workers in Germany, Spain, Italy, and France combined, O'Neill says.

Global companies, often frustrated by India's labyrinth of labor and land laws, are redrawing their business maps to target the nation's swelling young population. New Jersey-based Honeywell International, which makes jet parts and thermostats, has increased its number of employees in India to almost 13,000 from 1,000 in 2002. Companies

must establish their presence now, "not 20 years from now," CEO David Cote says.

Modi wants to make that easier by streamlining permits and building roads and ports. He's fond of telling investors "a red carpet, not red tape," awaits them. General Electric, which had been shut out of bids to modernize railways, opened a \$200 million factory to produce locomotive components and jet engine parts in Pune in February.

The rivalry between China and India extends beyond competition for investment. Even the carefully choreographed bonhomie between their two leaders, on display in May when Xi entertained Modi in his birthplace of Xian, can't veil the legacy of a border war the two nuclear-armed giants fought in 1962. In September, as the men were toasting each other at a dinner in Modi's hometown of Ahmedabad, two incidents soured the lovefest. High in the Himalayan snows, Indian and Chinese troops confronted each other along their disputed frontier after what New Delhi claimed was an incursion by People's Liberation Army soldiers. In the south, close to where India and Sri Lanka are separated by a 30-kilometer-wide strait, a Chinese submarine had docked silently a few days earlier in the Sri Lankan capital, Colombo-the first such visit.

China denied any border infiltration had occurred and brushed off the sub visit as a refueling stop. Yet even as China spoke of closer ties, was it reminding its rising rival of who calls the shots? "It's not clear that Xi Jinping authorized these acts," says Rory Medcalf, head of the National Security College at the Australian National University. "If he did, that shows a lack of good faith. If he didn't, that's at least as disturbing, because it shows no matter how hard Xi tries to improve the relationship, there's a great degree of mistrust at the military level that China's top leadership can't control."

At the end of the day, the China-India rivalry is no contest on most fronts. In economic clout, military might, geopolitical influence, literacy, health, life expectancy, and even sporting prowess (2012 Olympic medal count: China, 88; India, six), it will be an unequal competition for years to come.

Yet India's rise presents one challenge China's Communist Politburo may find impossible to match. "A degree of Indian success raises an enormous question mark over the Chinese political and development model," Medcalf says. "India's very existence is an example to third countries that they can be democracies and grow."

XI TWEAKS OBAMA



BY WILLIAM MELLOR

DESPITE THE CLUNKY NAME, the Asian Infrastructure Investment Bank promises to be "lean, clean, and green." And despite the fact it has said it will complement, not compete with, other agencies, the new China-led bank has emerged as a clear rival to the club of rich nations that control lending to the world's poor ones.

In the one-upmanship that drives geopolitics, the bank is a victory for Chinese President Xi Jinping as he vies with U.S. counterpart Barack Obama in Asia. The U.S. has called the shots at the New York-based World Bank since its formation in 1944. Japan has held the presidency of the Asian Development Bank from its birth in Manila in 1966. And only a Western European has ever claimed the managing directorship of the International Monetary Fund, which was created in 1945.

This year, though, Beijing succeeded in breaching the alliance of the affluent by persuading major European nations to sign up as founding members of the AIIB—despite Washington and Tokyo trying to talk them out of it. The U.S. and Japan say the bank lacks transparency and concern for the environment. China has pledged to be clean and green. Adding to the PR pitch, it's also stressing "lean," to imply that it offers less-bureaucratic decision making than its rivals.

China has long objected to its lack of clout at the World Bank, the IMF, and the ADB. It announced plans for the AIIB in 2013, saying the bank would fund transportation, energy, and communications projects across Asia. Since then, 57 nations have signed up to join the Beijing-based lender, including such U.S. allies as the U.K., France, Germany, Israel, and Australia. "The initial success of AIIB is a diplomatic victory for China," David Dollar, a senior fellow at the Washington-based Brookings Institution, wrote in a guest commentary for the Bloomberg Brief Economics Asia newsletter. "The U.S. diplomatic response has not been adroit, playing into the narrative of U.S. decline in the Asia-Pacific."

Dollar notes such perceptions may change if the U.S. plays a smarter hand in Asia, such as successfully implementing its proposed Trans-Pacific Partnership trade agreement. And the untested AIIB has much to prove. It will eventually be capitalized at a relatively modest \$100 billion, compared with the World Bank's \$225 billion and the ADB's \$150 billion. And it won't be making its first loan until the end of this year—time enough for global economies and alliances to shift.

Morgan Stanley Capital Creates More Commerce New technology can make even small businesses big. E-commerce leader Alibaba Group built an online and mobile marketplace connecting small businesses to customers in China and beyond. Morgan Stanley helped take the company public, leading a \$25 billion IPO — the largest in history. Alibaba's subsequent growth is helping fulfill the company's ambition of giving rural communities access to goods and services once considered out of reach. Across the globe, we're working to advance the technologies that help more people to prosper. Capital creates change. morganstanley.com/alibaba © 2015 Morgan Stanley & Co. LLC. Member SIPC. CRC 1122237 04/15

Why Argentina consistently, and unapologetically, refuses to pay its debts

UNFORGIVEN

BY MICHAEL SMITH

Argentina's fight with foreign banks and bondholders is more than just business. It's part of the national psyche, enshrined in a special museum at the business school at the University of Buenos Aires. The Museum of Foreign Debt is nothing fancy. There are a few flimsy panels plastered with grainy photos, dates, text, and graphs.

Oh, but the saga portrayed on those panels! Banks, bond investors, and the International Monetary Fund flood crooked regimes with overpriced credit. The Argentine economy collapses, and the people suffer. International markets are roiled. It happens time and time again. The story has all the emotions of a good tango.

Argentina has reneged on foreign debt obligations at least seven times, starting in 1827. The latest was in July 2014, when Argentina defaulted rather than give in to pressure from Paul Singer of Elliott Management. The fight with Singer has been going on for a dozen years, and the term *vulture investor*—rather esoteric in much of the world—is now pretty



much universally known in Argentina. It's so much on people's minds that Buenos Aires toy stores carry a homegrown board game called Vultures, packaged in a box depicting a pair of the birds picking at a pile of dollars. "We planted the antivulture flag in the world," President Cristina Fernández de Kirchner said in a speech in mid-May. "We gave a name to international usury and despotism."

One May morning at the debt museum, guide Antonella Fagnano, a 21-year-old business major, describes Argentines' attitude toward default. She pauses by a blackand-white photo of the late General Jorge Videla, who led a 1976 coup that ushered in a seven-year dictatorship. Successive presidents in that period loaded up on foreign debt to finance, among other things, the 1982 Falklands War with the U.K.

Today's Argentina, Fagnano says, has no moral obligation to make good on debts like those. In fact, it would be wrong to pay. "Foreigners financed a lot of leaders, like these dictators. They didn't do what they were supposed to do with the money, and left future generations the debt," she says, shaking her head. "So, of course, you cannot allow that."

With assistance from **Pablo Gonzalez**.

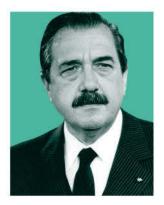
THIS PAGE: CLOCKWISE FROM TOP: WIKIMEDIA COMMONS, KUCHARZVILLSTRIB BILD VIA GETTY IMAGES; DYN/GETTY IMAGES; SERGEY BOBYLEV/KOMMERSANT PHOTO VIA GETTY IMAGES; JACOB KEPLER/BLOOMBERG; LEO LA VALLE/NEWSCOM. OPPOSITE: CLOCKWISE FROM CELMAN: WIKIMEDIA COMMONS; EVERETT COLLECTION HISTORICAL/ALMY; OFF/APPOSETTY IMAGES; IMOTHY A. CLARY/APPOGETTY IMAGES; TOLLECTION ANNIEL GARCIA/APPOGETTY IMAGES; VICTOR R. CAIVANO; DANIEL GARCIA/APP/GETTY IMAGES; VICTOR ROJAS/APP/GETTY IMAGES; STR/APP/GETTY IMAGES



Argentina defaults for the first time, failing to make payments on foreign debt taken on after independence from Spain a decade earlier. The default sends financial markets into turmoil.

.......

......



1983

President Raúl Alfonsín ushers in a return to democracy, but his government is crippled by hyperinflation and debt. Alfonsín introduces a new currency, the doomed austral. He declares a six-month moratorium on making payments.

Alfonsín officially defaults on foreign debt payments.





In a single week, Argentina has five presidents. One of them, Adolfo Rodriguez Saá, declares the biggest default in world history, on \$95 billion of mostly foreign debt. The country slides into recession. Within months, the peso jumps to almost 4 to the dollar.







Paul Singer's Elliott Management starts suing to be repaid for defaulted Argentine debt it bought for pennies on the dollar. Singer has demanded ever since to be paid in full. President Néstor Kirchner, followed by his successor and wife, Cristina Fernández de Kirchner, refuse to pay, calling Singer a vulture. Years later, Singer's fund tries to seize an Argentine navy ship in Ghana and weapons in U.S. warehouses in lieu of payment. Fernandez has to rent a private jet for a visit to Indonesia to keep Singer from seizing the presidential plane.



1890

A second default, and the government of President Miguel Juárez Celman collapses. Markets are roiled. The Bank of England bails out one big creditor, Baring Brothers & Co.

Former military commander Juan Domingo Perón pays off Argentina's foreign debt with revenue from grain sales to war-ravaged Europe. Perón refuses to join the recently created World Bank and IMF and take on new debt



1956

A year after Perón is toppled in a coup, Argentina becomes a member of the IMF and World Bank. The move ushers in decades of borrowing—and of vociferous complaining. For the next 50 years, Argentine leaders will villfy the IMF for pressuring the country to cut its spending and increase its debt payments.



1976

General Jorge Videla leads a coup that topples the government of Isabel Martínez de Perón, Juan Perón's widow. This ushers in a vicious dictatorship whose economic policies drive up foreign debt.



1989

Carlos Menem wins the presidency and imposes draconian currency controls that peg the dollar to the peso, 1 to 1. To finance this move, Menem sells off massive state companies and piles on foreign debt.



President Fernando de la Rúa tries to sustain the currency peg. As investors and the rich pull funds from the country, De la Rúa freezes all bank accounts. Waves of rioting spread across the country. On Dec. 21, De la Rúa resigns and flees the presidential palace in a helicopter.

2005

Néstor Kirchner plays hardball with investors and negotiates a restructuring that forces them to forgive roughly 70 percent of Argentina's debt. Creditors holding about 72 percent of the country's bonds, by value, accept the deal. Paul Singer and a few others say no

Néstor Kirchner's government pays off all IMF debt.

June 2014



The 2012 ruling of U.S. District Judge Thomas Griesa goes into effect. Argentina can't pay holders of its restructured debt (now about 93 percent of total debt) without also paying more than \$1.5 billion to holdouts. Griesa becomes a household name in Argentina.

July 2014

Economy Minister Axel Kicillof balks at a deal to repay the holdouts. He walks out of a New York meeting with creditors, and Argentina defaults again. The country has deposited \$539 million in payments on the restructured debt in a New York bank, and more in the Argentine central bank, but it can't be distributed to creditors





A board game called Vultures, a Game for People Without Scruples, appears in Buenos Aires toy stores. Players pose as global bankers during a growing financial crisis, lying, cheating, and embezzling their way to success.

ENERGIZING SOUTHEAST ASIA

Oil, gas and opportunity flow throughout ASEAN's 10 member countries

Later this year, the Association of Southeast Asian Nations (ASEAN) will embark on a major economic overhaul. By launching the ASEAN Economic Community (AEC), a regional integration initiative in the mold of the EU, the 10 member countries have a simple, if ambitious goal: the formation of a single regional market and productive base that promotes the free flow of goods, services, investment and skilled labor.

Of the many factors required to ensure the AEC's success, energy security tops the list. Today, more than 625 million people live in Southeast Asia—a figure estimated to reach 690 million by 2020—and the population's increasing demand for a modern standard of living means that every ASEAN government and private-sector enterprise must make energy a priority.

As an industry leader, PTT Group, a Thai state-owned energy company, remains committed to enhancing collaboration in the oil and gas sector for the good of all Southeast

Asia. "It is imperative that all ASEAN countries jointly develop their people and natural resources to create regional energy security and stability, as well as to ensure equitable economic prosperity," explains Dr. Pailin Chuchottaworn, President and CEO of PTT Group. "Learning to share limited resources through technology will bolster ASEAN's competitiveness in the global economy."

PTT sees its role as not only investing in and maximizing oil and gas exploration, but also in engineering cultural and commercial connections between energy companies in the ASEAN region to maximize the flow of good business. With that in mind, it should come as no surprise that PTT has made an impact in every ASEAN country.

In Brunei, PTT has helped local producers increase the value of their crude oil exports through trading in the global market, while in Cambodia, it is supplying LPG and petroleum products for domestic consumption. Farther to the East, PTT

is helping Indonesia explore growth opportunities in petrochemical production, and helping Vietnam build a large-scale petrochemical refinery complex.

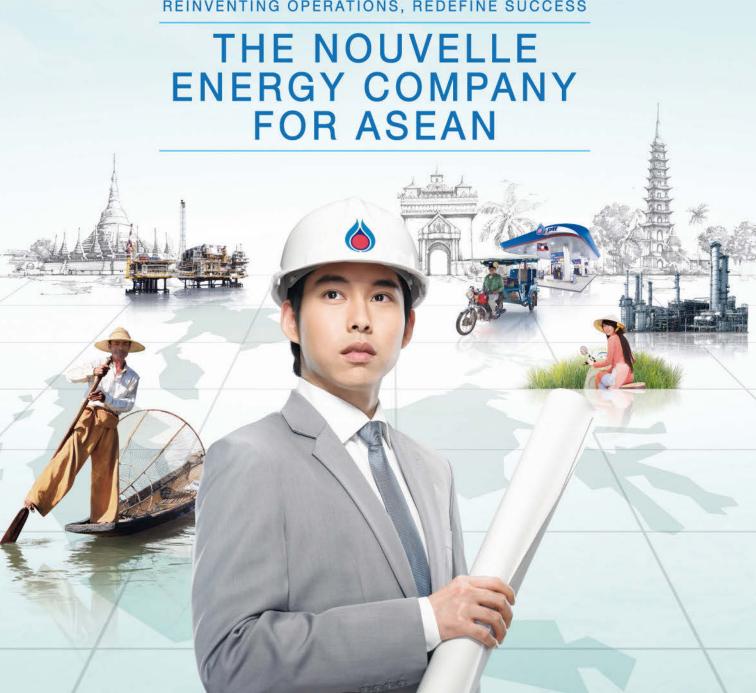
To the West, PTT is conducting feasibility studies of gas-fired power plants and refineries in Myanmar; helping to complete the supply chain in fuel oil trading in Malaysia; enhancing its existing petroleum and retail business in the Philippines; and expanding its crude oil, condensate, petroleum and petrochemical offerings in Singapore.

PTT also shows a strong commitment to sustainability, particularly at home in Thailand. Believing that science education is one solution to the world's energy challenges, PTT created the Kamnoetvidya Science Academy, as well as the Vidyasirimedhi Institute, a world-class science and technology research university. Just last year, PTT also assumed a key role through the ASEAN Council on Petroleum that will further nurture cooperation. As the Secretary in Charge, PTT organized the 79th ASCOPE National Committee Meeting in May to address high-level energy collaborations, from construction of the Trans-ASEAN Gas Pipeline to renewal of the ASEAN Petroleum Security Agreement.

As PTT knows, the key to a successful energy business in ASEAN is all about learning to collaborate and to share limited resources, which range from technology and technical skills to capital and opportunities. "PTT believes that only by working together among countries, can ASEAN be competitive in the global arena," Dr. Pailin explains. "The balance between energy security and increasingly limited energy resources within the region must be struck now for ASEAN's current economic progress and consumption—and for ASEAN children's future."



REINVENTING OPERATIONS, REDEFINE SUCCESS





With over 30 years of experience, PTT Group have shown our commitment to succeed in becoming leading ASEAN energy company with the aim to be one of the most admired ASEAN business enterprises. We relentlessly strive for sustainable growth via technological know-hows and innovations. Nonetheless, PTT Group will continue to explore the boundless possibility to help improve business and community in the region. We are growing impactful CSR programs across ASEAN countries. At PTT Group, we envision ourselves as an intrinsic partner who embraces AEC macrocosm. We hope to become a catalytic business organization whose success contributes to sustainable future for ASEAN.



STREET SCHISM

ERCHNG 1115 BY MICHAEL J. MOORE

The CEOs of Goldman Sachs and Morgan Stanley are leading their firms in opposite directions.

One grew up in Brooklyn public housing, the son of a postal worker, and shared a bedroom with his grandmother. The other was born half a world away, in Australia, the son of an engineer and the sixth of 10 children in a comfortable Melbourne household.

One was a tax attorney who became a precious metals salesman. The other spent years at McKinsey & Co. before going into banking. One is short, bearded, and has a joke for every occasion. The other is tall, cleanshaven, and matter-of-fact.

Nationality

Age

Previous employment

Education

Tenure as CEO

Compensation (2010 - 2014)

Blankfein

American

60

Tax lawyer, J. Aron salesman

Harvard University. Harvard Law School

9 years

S126.6 M

Gorman

Australian

57

McKinsey consultant. Merrill Lynch executive

University of Melbourne. Columbia **Business School**

5.5 years

S74.S M

They are Lloyd Blankfein and James Gorman, and they run the only surviving stand-alone investment banks in the U.S.-Goldman Sachs and Morgan Stanley. They're as different in appearance, personality, and style as the antipodes that mark their birth. And, while they still compete in many businesses, they're steering their firms in opposite directions.

Gorman, 57, chief executive officer of Morgan Stanley, has put his chips on his bank's retail brokerage. Blankfein, the 60-year-old CEO of Goldman Sachs, is betting the trading business that dominated Wall Street before the financial crisis will flourish again with fewer competitors around to enjoy the results.

For all their history, the firms are embodiments of their current leaders' visions. Gorman, in the middle of his sixth year as



CEO, pushed for a get-big-or-get-out strategy in wealth management even before he rose to the top and seized a chance to buy Smith Barney from Citigroup during the financial crisis. Blankfein, who's starting his 10th year in command and had opportunities to change Goldman Sachs's course, decided he liked the businesses he had.

"There's always been, in the recent period of time, some controversy over business models," Blankfein told a business school audience in South Africa in April. In the past, many of the largest firms "you could have put into buckets. Now, everyone is almost a category of one."

Even as trading languished across the industry in recent years, Goldman Sachs has outperformed Morgan Stanley by most financial measures. Its return on equity of

Tale of the Tape

Goldman Sachs has twice the ROE of its rival. Morgan Stanley, which has focused on wealth management, has had better stock performance.

going to be Goldman, because they have a proven track record of doing that time and time again."

The differences between the two firms can best be seen in what each one has that the other lacks.

Morgan Stanley's retail brokerage stretches from an office in Bangor, Maine, to one in Anchorage, Alaska, and serves 4 million customers who on average have about \$500,000 with the firm. With 16,000 advisers, it has brought in \$9.6 billion in pretax profit in the past five years without posting a losing quarter, has a 20 percent margin, and requires only \$5 billion of regulatory capital. It's a good fit with new banking rules.

For Goldman Sachs, the comparable money-making engine is the business that houses the firm's investments. It's largely composed of loans, stakes in its own private equity and hedge funds, and a secretive principal-investing team called the special situations group. The human requirement is small, accounting for fewer than 10 percent of the company's partners, but the investments, which include everything from

When Facebook's Morgan Stanley-led 2012 IPO went poorly—marred by a delayed opening and a 31 percent share price drop in the first three weeks of trading—some Goldman Sachs bankers whispered that Morgan Stanley would lose customers. Some Morgan Stanley bankers countered that Goldman Sachs, which also worked on the deal, backed away from Facebook when things went south.

Even in businesses where they overlap and compete, the firms have taken different paths. Goldman Sachs remains committed to its commodities division despite regulatory scrutiny, while Morgan Stanley has made an effort to sell oil and gas units. Morgan Stanley sought to cut the amount of capital needed in its rates-trading business, and last year reduced the notional amount of related derivatives by almost one-fifth, to \$31 trillion. Goldman Sachs, which is bigger in rates, increased the notional value of those derivatives by \$3 trillion to \$47 trillion.

Last year, Blankfein found himself onstage addressing an unusual audience: Morgan Stanley brokers. Goldman Sachs

		Employees	Founded	Public Public	on Equity	(in billions)	Return (2010–2015)	Pront Margin
Goldman Sachs	Þ	34,000	1869	1999	11%	\$34.528	32%	36%
Morgan Stanley	Þ	55, S02	1935	1986	5%	\$34.275	35%	10%

 $All\,figures\,are\,for\,2014,\,unless\,otherwise\,noted.\,Source:\,Bloomberg$

11.2 percent last year was twice as high, and it produced more revenue with 40 percent fewer employees. That's led to a pay gap: Blankfein was awarded \$126.6 million over the past five years, while Gorman received \$74.8 million. Still, investors have latched onto Morgan Stanley's turnaround story, pushing its shares to greater gains than Goldman Sachs's in back-to-back years for the first time since Goldman Sachs went public in 1999.

"People find Morgan Stanley really attractive because there is this transformation in place," says Steven Chubak, an analyst at Nomura Holdings in New York. "The bull thesis on Goldman Sachs is that if anyone can adapt well to the current challenges, it's

distressed loans bought from European banks to a stake in an Israeli company that makes software for self-driving cars, have earned \$15.2 billion in pretax profit during the past five years on a margin of more than 50 percent. The segment requires more than \$15 billion in regulatory capital, based on disclosures of risk-weighted assets, and posted a \$2.6 billion loss in one quarter. New rules are forcing the bank to cut stakes in its own funds and decide whether it wants to replace them with direct investments.

The banks still compete in almost all of their businesses, whether it's to win an initial public offering from a tech company, woo a hedge fund to their prime brokerage, or outbid the other on an oil trade. There's plenty of sniping, too. was pitching a new fund that invested in master limited partnerships, tax-exempt companies that own energy assets such as pipelines. Morgan Stanley was leading the syndicate handling the roadshow. Greg Fleming, president of Morgan Stanley's wealth management division, was interviewing Blankfein to show that the fund was the right product for clients.

"I've been at the firm long enough to remember the days when Morgan Stanley and Goldman Sachs were the Hatfields and McCoys, and you'd never think of them cooperating on anything," says Timothy O'Neill, co-head of investment management at Goldman Sachs. "But we're great partners in wealth management now."

The banks' strategies are reflections of men with different personalities, philosophies, and histories. Gorman went to a Catholic boarding school in Melbourne. Blankfein grew up in a Jewish neighborhood in Brooklyn and attended a public high school where violence sometimes forced

BLOOMBERG TIPS Comparing Goldman and Morgan Stanley

You can use the Bloomberg Intelligence Investment Banking Dashboard to compare Goldman Sachs and Morgan Stanley. Type **BIBNK <Go>** on the Bloomberg Professional service. Click on Company under Data Library on the left side of the screen. Then click on the plus sign to the left of a data item such as Compensation Ratio to expand the list of companies. Jon ASMUNDSSON

him to stay on the bus until it looped back

Gorman always held strategic roles, advising Merrill Lynch & Co. as a McKinsey consultant before jumping to the Wall Street firm as head of marketing. Blankfein was a currency salesman in the middle of the trading floor and later ran his own book to gain the respect of the traders he oversaw.

Blankfein rose to power in part because of the fixed-income trading profits in the years before the financial crisis. Gorman's ascension was aided by losses on bond-trading desks when markets collapsed in 2008.

Gorman's strategy is driven by a belief that the success of all businesses ultimately comes down to execution. He's a disciple of stated goals, strategic updates, and markedto-market checklists. He writes his firm's results by hand every night at his Upper East Side home and keeps a list of 10 priorities in a clear folder on his desk at work, checking them off in red ink as they're accomplished. He asks deputies if new ideas fit with the firm's mission statement and doesn't hide it if he disagrees, colleagues say. He takes time

Tve been at the firm long enough to remember the days when Morgan Stanley and Goldman Sachs were the Hatfields and McCoys.

humbled by decades in the financial markets he calls the "sentiment business," might hesitate to predict what he'll have for lunch. Calls for forecasts are met with some version of "I will have a very clear answer in hindsight." He prizes flexibility and speaks often of his firm's need to be nimble. Any stated targets may reduce its ability to be opportunistic with capital or pay.

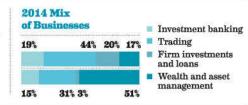
in the 1980s, Goldman Sachs was buying a commodities shop, J. Aron & Co., and bolstering its reliance on trading.

Morgan Stanley weathered power struggles after its 1998 merger with Dean Witter, whose Main Street brokerage and Discover credit card business made the firm more retail. Meanwhile, Goldman Sachs was riding the growth of fixed-income trading. Its 1999 IPO was 12.5 times the value of Morgan Stanley's, and it had better stock performance in each of the next six years. The firm spread its influence. Alumni include U.S. Treasury Secretaries Robert Rubin and Henry Paulson and the current leaders of the two biggest central banks in Europe, Mario Draghi and Mark Carnev.

Under John Mack, Morgan Stanley tried to emulate Goldman Sachs's formula of boosting profit through proprietary trading and investments with the firm's money. That ended with a mortgage prop-trading desk losing more than \$9 billion and an investment in an Atlantic City, New Jersey, casino that cost it \$1 billion.







making decisions, but once he puts someone in place, he rarely micromanages.

"Each year I try to focus on about 10 priorities that I personally will get involved with," Gorman said after the firm's annual meeting in May. "The organization is full of very talented people, and it's going to do just fine with or without me sitting here. So there are certain things I can move the needle on."

Morgan Stanley has targets for everything-return on equity, assets under management, risk-weighted assets, compensation ratios, and fee-based flows, to name a few. The bank doesn't always meet those goals. Still, it has won plaudits from investors. Morgan Stanley traded at a multiple of 19 times its earnings over the 12 months ended in March, the highest of any major U.S. bank.

Goldman Sachs doesn't have a single firmwide target. The bank has resisted calls for an ROE goal and has dismissed the notion that benchmarks in its executive-pay packages represent a target. Blankfein,

Blankfein's trust-us approach gets the benefit of the doubt from investors because his firm has had the highest ROE of any major investment bank over the past three years. Goldman Sachs executives also note that shareholders aren't missing out on much: Almost every competitor that has published an ROE target has later cut it.

Meanwhile, Blankfein preaches patience. "You can't extrapolate from the highs, and you certainly can't extrapolate from the lows," he said after the company's annual meeting in San Francisco in May. "I hope I don't look back at this period as the golden age."

Wall Street's most enduring rivalry has gone through many cycles over its eightdecade history. Morgan Stanley, founded in 1935 after the Glass-Steagall Act forced J.P. Morgan & Co. to separate its investmentand commercial-banking businesses, was once the white-shoe firm with a pedigree. It was a coup for Goldman Sachs to join it in advising big U.S. companies such as Ford Motor. When Morgan Stanley went public

Both firms converted to bank holding companies in 2008 so they could borrow from the U.S. Federal Reserve, recruited outside investors, and received government bailouts. But the rates at which they bounced back differed dramatically.

Morgan Stanley continued to limp along as Gorman took over at the end of 2009, while Goldman Sachs posted record profit that year, taking advantage of recovering markets and fewer competitors. Goldman Sachs's performance, along with its reputation for aggressive behavior and its short bet on the U.S. housing market, made it the face of Wall Street greed. Morgan Stanley stayed out of the spotlight, prompting the joke told at both firms that it "strategically underperformed" during and immediately after the financial crisis.

Those experiences shaped the banks' trajectories. Morgan Stanley needs to show steady progress after years of financial turmoil and one-time charges. Goldman Sachs, whose reputation is the worst of any major U.S. company according to a Harris poll this year, has to try to change the public's perception.

"Everybody's got to do whatever they do based upon their own circumstances," Gorman said in May. "And clearly we were more fragile than some, and less than others, coming out of the financial crisis."

Gorman is an unabashed champion of his firm, extolling the changes it has made and speaking on each quarterly investor call. Blankfein has taken a statesmanlike role in recent years, commenting on the economy and government policies more often than on earnings. He's more likely to appear alongside a politician promoting Goldman Sachs's philanthropic work than he is to speak at an investor conference.

As different as the two men are, they have some things in common. They both abandoned careers as lawyers and can appreciate what it means to be pressured by clients, shareholders, bondholders, employees, media, regulators, charities, and even friends trying to get their kids jobs. Both draw on past experiences as outsiders for a dash of humility. Gorman talks of paying more than 20 percent interest on student loans as he traveled 10,000 miles (16,000 kilometers) from home for business school. Blankfein tells tales of working as a food vendor at Yankee Stadium to earn money.

They've also earned each other's respect. "They're a great firm and as tough and resilient a competitor as we face," Blankfein says. The rivalry "pushes each of us to be better," echoes Gorman.

Just as their disparate paths led them to the same spot, the two have embraced strategies that can yield the same results: superior returns, higher stock prices, and risk levels low enough to avoid calamity. One doesn't have to lose for the other to win. "Can they both succeed?" asks Christopher Wheeler, a bank analyst at Atlantic Equities in London. "Yes." On the new Wall Street, there's more than one way to the top.

BY ELENA LOGUTENKOVA

AND JEFFREY VÖGELI

ONE OF SWITZERLAND'S TWO GLOBAL BANKS was conspicuously absent from the Innovation in Finance conference in April at the Dolder Grand, a castlelike hotel overlooking Zurich. Credit Suisse Group, the country's second-biggest lender, sponsored the event. That meant no one from UBS Group, the largest Swiss bank and the world's top manager of money for the wealthy, was invited to speak. Instead, bankers from firms that don't compete with Credit Suisse in private banking took the stage.

UBS and Credit Suisse, with business operations spanning the globe and headquarters a few blocks apart in Zurich, have long been fierce rivals. Before the 2008 financial crisis, when investment banking was still in vogue, both would lay claim to being top dog in Switzerland, using different league tables to make their case.

Since taking over in 2011, UBS CEO Sergio Ermotti has scaled back investment banking, while Credit Suisse has clung to a bigger trading business. Meanwhile, the end of Swiss bank secrecy, for decades a magnet for billions of dollars and a source of profit for both banks, has eroded margins.

Now, the companies are competing more for private-banking business. They're revamping the way they service the wealthy—hiring new chief investment officers, introducing contracts where clients pay for advice rather than transactions, and trying to catch up to the digital revolution. And they're vying to show they are first or best.

Credit Suisse is the fourth-biggest private bank by assets under management, behind No. 2 Bank of America and No. 3 Morgan Stanley, according to an annual ranking by Scorpio Partnership. Its assets of 861.2 billion Swiss francs (\$920 billion) at the end of March were less than half of UBS's 1.99 trillion francs. Still, the rivalry is intense. Both are targeting the ultrarich, a group of about 200,000 individuals worldwide, says Alevizos Alevizakos, an analyst at Keefe, Bruyette & Woods in London. "Most of these clients won't put all their money into one bank but will use both for different purposes or offerings," Alevizakos says. "I wouldn't say that there is a clear winner between UBS and Credit Suisse at the moment."

Investors have rewarded UBS for shrinking its investment bank and focusing on wealth management. UBS shares were up 37 percent from the end of 2008 to June 1, while Credit Suisse's were down 11 percent, even though the smaller bank survived the financial crisis with fewer losses. It's no surprise, then, that Credit Suisse didn't want its chairman, Urs Rohner, who spoke at the April conference, to share a stage with the competition. After all, he's already being prodded by investors to scale back the investment bank—what the Swiss call "do a UBS"—after Tidjane Thiam replaces Brady Dougan as CEO at the end of June.

44 BLOOMBERG MARKETS JULY/AUGUST 2015

ILLUSTRATION BY KYLE WEBSTER



GOLFERS SAM SNEAD AND BEN HOGAN

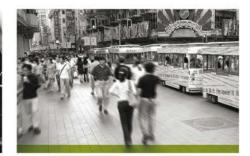
'I think they respected each other, but I don't think they really liked each other. The first time I met Snead, he asked me where I played. I told him Seminole, which is Hogan's home course. "You know I played there with Hogan about 10 times," he said. And I said, "Yes, everybody knows that." Then he looked at me steely eyed and said, "Does everybody know I beat him every time we played?"

JAMES DUNNE, SENIOR MANAGING PRINCIPAL AT SANDLER O'NEILL AND PRESIDENT OF SEMINOLE GOLF CLUB

We See Opportunity All Over the World.







IVY GLOBAL/INTERNATIONAL PRODUCT LIST:

Global Broad

Ivy Asset Strategy Fund (WASAX)
Ivy Global Growth Fund (IVINX)
Ivy Cundill Global Value Fund (ICDAX)
Ivy Managed International
Opportunities Fund (IVTAX)

Global Fixed Income

Ivy Global Bond Fund (IVSAX) Ivy Emerging Markets Local Currency Debt Fund (IECAX)

Global Income

Ivy Global Income Allocation Fund (IVBAX)
Ivy Global Equity Income Fund (IBIAX)

Global Specialty

Ivy Global Natural Resources Fund (IGNAX)
Ivy Global Real Estate Fund (IREAX)
Ivy Global Risk-Managed Real
Estate Fund (IREAX)

International Broad

Ivy International Core Equity Fund (IVIAX)

Regional

Ivy European Opportunities Fund (IEOAX)
Ivy Emerging Markets Equity Fund (IPOAX)

When it comes to global and international investing, borders and regions don't define the opportunities. At Ivy Funds, we seek to invest in great companies across the globe; companies we feel are best positioned to take advantage of the opportunities a region or investment category might provide.

Our research analysts are assigned by sectors, regardless of geography, and conduct their own original research. This information is then shared with the entire investment team across all sectors, daily, to consistently identify differentiated, investable ideas in today's interconnected global marketplace. This time-tested approach drives everything we do, and provides the foundation for our proprietary investment process on behalf of our investors.

Learn more about our international and global investing capabilities at ivyfunds.com.

IVYFUNDS.COM
FACEBOOK.COM/IVYFUNDS



Investors should consider the investment objectives, risks, charges and expenses of a fund carefully before investing. For a prospectus containing this and other information for the lvy Funds, call your financial advisor or visit us online at www.ivyfunds.com. Please read the prospectus or summary prospectus carefully before investing.

Past performance is not a guarantee of future results. The value of the Funds' shares will change, and you could lose money on your investment. International investing involves additional risks, including currency fluctuations, political or economic conditions affecting the foreign country, and differences in accounting standards and foreign

regulations. These risks are magnified in emerging markets. These and other risks are more fully described in the fund's prospectus. Not all funds or fund classes may be offered at all broker/dealers.

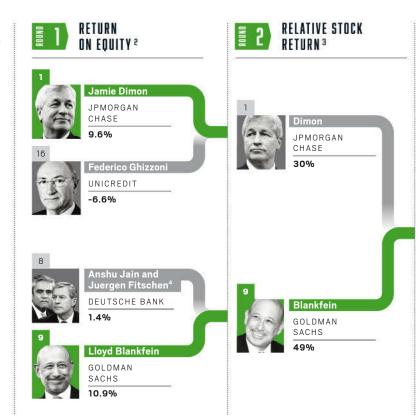
BANKERS AREN'T A

modest bunch. To help them determine who really has bragging rights as the industry's top dog, we crunched the numbers. (Hint: It's not Jamie Dimon.)

To start, we narrowed the field to the leaders of the 16 biggest1 global banks. Because this is a test of managerial prowess, we excluded firms owned or controlled by governments and those whose CEOs have been in charge less than three years. Then we plugged their names into everybody's favorite equalizer: a tournament bracket.

In the first round, the CEOs competed on the most-watched measure of profitability: return on equity. Then, to see how their strategies are received by investors, we judged them on stock performance in relation to indexes in the regions where they're based. The final four were measured by Warren Buffett's preferred yardstick: growth in book value per share. And the last challenge? Legal bills as a percentage of profit, a test of how well they've managed to protect their firm's reputation-and their own.

THIS PAGE. COLUMN 1, TOP TO BOTTOM:
JASON ALDEN/BLOOMBERG: CHRIS
RATCLIFFE/BLOOMBERG: JASON ALDEN/
BLOOMBERG: HANNELORE FOERSTER/
BLOOMBERG: SCOTT EELLS/BLOOMBERG:
BILLY H.C. KWOK/BLOOMBERG: AKIO KON/
BLOOMBERG: SCOTT EELLS/BLOOMBERG:
BILLY H.C. KWOK/BLOOMBERG: AKIO KON/
BLOOMBERG: GABRICED BUILEY/
BLOOMBERG: GABRICED BUILEY/
BLOOMBERG: GALIN TPORNECZI/
BLOOMBERG: GALIN BON/BLOOMBERG:
BALINT PORNECZI/BLOOMBERG: COLUMN 3:
SIMON DAWSON/BLOOMBERG: COLUMN 5:
SIMON DAWSON/BLOOMBERG: OPPOSITE PAGE.
COLUMN 1, TOP TO BOTTOM: SIMON
DAWSON/BLOOMBERG: COLUMN 5:
BLOOMBERG: AKIO KON/BLOOMBERG:
CHRIS RATCLIFFE/BLOOMBERG:
CHRIS RATCLIFFE/BLOOMBERG:
CHRIS RATCLIFFE/BLOOMBERG:
CHRIS RATCLIFFE/BLOOMBERG:
CHRIS RATCLIFFE/BLOOMBERG:
BLOOMBERG: COLUMN 2: SIMON
DAWSON/BLOOMBERG: TOMOHIRO
BLOOMBERG: RICHARD PATTERSON/THE
BLOOMBERG: RICHARD





Blankfein GOLDMAN SACHS

GROWTH IN BOOK Value per share³

BRACKETOLOGY

WHO'S THE BEST

BY HUGH SON AND MICHAEL J. MOORE



Stuart Gullive

HSBC HOLDINGS

8%



Koichi Mivata

SUMITOMO MITSUI GROUP

12.1%



Jean-Laurent Bonnafé

BNP PARIBAS

4.9%



Frédéric Oudé

SOCIÉTÉ GÉNÉRALE

3.4%



Miyata

Bonnafé

PARIBAS

RNP

SUMITOMO MITSIII GROUP

6%



Bonnafé

BNP PARIBAS

17%

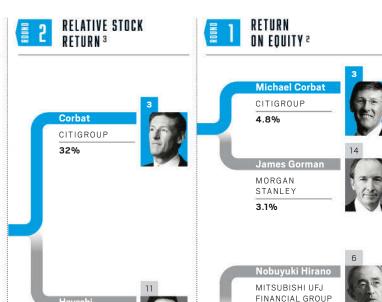




CITIGROUP

9%

3





Lloyd Blankfein, 60, has run Goldman Sachs since 2006, keeping the investment banking and trading titan at the top of Wall Street's hierarchy even after it was branded a "vampire

John Stumpf, 61, has helped turn Wells Fargo into the most valuable U.S. bank by sticking to traditional banking activities such as mortgage lending.

FINAL

ROUND

squid."



CEO IN BANKING?

8.9%

11.3%

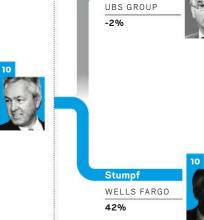
Nobuhide Hayashi

MIZUHO FINANCIAL GROUP

AND THE WINNER IS ...

Wells Fargo had \$1.72 billion in litigation and legal expenses during the past three years, or 2.7 percent of the firm's \$63.8 billion profit. Goldman Sachs had \$3.68 billion in legal costs, or 15 percent of its \$24 billion in profit.





MIZUHO

GROUP

-1%

FINANCIAL

Brian Moynihan

BANK OF
AMERICA
2.5%

Sergio Ermotti

UBS GROUP
2.9%

Antony Jenkins

BARCLAYS
-0.2%

John Stumpf

WELLS FARGO
13.6%





THE FIRST WOMAN TO RUN A WALL

Street firm could be a behavioral scientist, a mathematician, or an engineer.

Three women with these backgrounds—Karen Peetz, president of Bank of New York Mellon; Mary Callahan Erdoes, chief of asset management at JPMorgan Chase; and Avid Modjtabai, head of consumer lending at Wells Fargo—are all currently within striking distance of the CEO suite.

Then again, none of them may get there.

"I see more banks looking into increasing the level of senior women," says Elisabetta Bartoloni, a partner at headhunting firm Heidrick & Struggles. They're motivated in part by studies that have shown having diverse management helps companies achieve better results, she says.

But talk is cheap, and Wall Street's woman problem runs deep. So deep, in fact, that it begins even before recruiting starts.

Consider this: 34 percent of MBA graduates

'there's nobody like me' at the senior levels."

As women move to the middle ranks, things start to get even trickier. That's when what's called the leaky pipeline becomes especially evident, Bidwell says: "It's not feeding them through quickly to the highest levels."

One common explanation is that women drop out of Wall Street in their 30s to start families. That's not borne out by reality, says Pamela Stone, a Hunter College sociology

STUCKINMIDDLE

After all, no woman has *ever* been CEO at one of the 22 largest U.S. investment banks or financial firms, and none of these three female executives wanted to speculate on her chances.

Women have been close to the top of Wall Street firms before, only to get derailed or swatted away. Both Zoe Cruz, president of Morgan Stanley, and Sallie Krawcheck, head of Citigroup Global Wealth are women. That's up from 28 percent in 2002 but still far below the near parity in other fields such as medicine and law, according to the Forté Foundation, a consortium of business schools and companies, including Citigroup and Goldman Sachs. (An MBA is still a prerequisite for many investment-banking jobs.) And only about 20 percent of those female business school graduates say they'd even consider a career in

Wall Street says all the right things about promoting women, but the numbers tell a different story.

Management, lost their jobs following the financial crisis. Ina Drew, another contender, left JPMorgan Chase in 2012 amid the London Whale scandal. And earlier this year, Ruth Porat, Morgan Stanley's chief financial officer, whom many considered a potential CEO, said she would instead decamp to Google for a \$70 million paycheck.

Banks have certainly come a long way since the 1980s, when Goldman Sachs apologized after a Stanford University student said one of its recruiters asked her if she would have an abortion to save her job. Many banks now employ diversity chiefs and brag about affinity groups, parental leave, returnto-work programs, and Lean In Circles.

financial services, compared with 36 percent of men, according to research by Universum Global. What's more, that disparity has been increasing in recent years.

Selling women on a career in investment banking should begin as early as their freshman year in college, says Elissa Ellis Sangster, head of the Forté Foundation. "You've got to build the pipeline early," she says.

When women do apply for banking jobs, they're just as likely to get them as men are, says Matthew Bidwell, a professor of management at the University of Pennsylvania's Wharton School who has studied gender in finance careers. However, he adds, "women are less likely to apply because they see that

professor. In a study Stone co-authored last year, which looked at 25,000 Harvard Business School MBAs, only about 11 percent of women actually left their jobs to stay home with children. More often than not, Stone says, women at investment banks saw few opportunities for advancement and moved to other fields that let them have more of a life. "They need *stay* policies, not leave policies," says Stone.

Grueling hours wore down Tamara Abed, who worked in mergers and acquisitions at Goldman Sachs after earning her MBA at Columbia University in 2001. "I found it quite soulless," Abed says. She had been an investment banker in Asia and knew long hours were involved. But Wall Street was of a whole different magnitude. "You had to write off your life," she says, recalling evenings when she slept under her desk. Abed quit after less than a year and is now a senior manager at BRAC, a nonprofit organization based in Bangladesh and founded by her father.

Even among the women who stick it out, fewer advance to the senior level, a

BY LAURA COLBY

condition that's worsened since the financial crisis. Women made up 48 percent of midlevel managers in 2013 but accounted for just 29 percent of senior officials in finance



Barbara Byrne, Karen Peetz, Mary Callahan Erdoes, and Avid Modjtabai, from left, are among the few high-ranking women in banking.





and insurance, according to data collected by the Equal Employment Opportunity Commission. Those numbers were worse than in 2007, the earliest comparable year available, when women accounted for 30 percent of senior managers and 49 percent of midlevel managers. The pipeline is even narrower among the 22 largest firms, where women comprise just 16.6 percent of senior managers.

One whose career stalled was Yiming Wang, who spent almost six years on Wall Street as a portfolio analyst. "I got pigeonholed in a job that was tedious and boring," she says. In 2010, she guit to start a Chinese restaurant in Manhattan that later earned a Michelin star. "It's a completely new life," she says, smiling as she surveys her newly opened second eatery, China Blue, in Tribeca. "I'm in love with it."

The few women who've managed to make it near the top advise those lower down to power through. "Almost everyone in this career will encounter moments where they're told they are average or below average," says Barbara Byrne, vice chairman of Barclays Capital, who held the same post at Lehman Brothers before it was acquired. "Men will get angry; women will oftentimes quit." Instead, they should project confidence, even if that doesn't come naturally, says Byrne, 60. At Barclays, she's gathered about 25 young women investment bankers together for training that aims to teach them how to command a room—whether of clients or co-workers. "It's creating a cadre of women who can bond together, so they know they're not alone," she says.

At BNY Mellon, Peetz urges midlevel women who feel stuck to consider lateral moves that will expand their range of experience. "Very senior careers take many years to build, so they shouldn't get impatient," says Peetz, 59. "You just don't know when something you did when you were 25 turns out to be super helpful when vou're 50."

Many top-tier women manage to have children and still advance. Erdoes, 47. a mother of three young children, founded a re-entry program at JPMorgan in 2013 for women who've left the workforce.

But a career on Wall Street comes at a price. "There's this myth that, if you're going to the top, you can have it all," says Peetz, a mother of two. "Work-life balance is not possible to the degree that people kind of idealize."

Wells Fargo's Moditabai, a senior executive vice president, knows that well. She spent about three years after her son was born working "part time"—in reality about 50 to 60 hours a week. She declined her boss's offer to go back to full-time status because, she says, she wanted the option of saying no if she couldn't attend a meeting. She never did.

Now 53 and long back at work full time, Moditabai is so heavily scheduled that her PR handler promises her a two-minute break to prep for her next meeting. She says she tries to carve out time to spend with family and friends over the course of a month, a quarter, or a year, rather than scheduling it on a daily or weekly basis. "I don't believe that there is balance," Modjtabai says. "The reality is that there isn't."

ILLUSTRATION BY KYLE WEBSTER

50 BLOOMBERG MARKETS JULY/AUGUST 2015

A RIVALRY I LOVE

DUKE UNIVERSITY AND UNIVERSITY OF NORTH CAROLINA

'To me, it's the greatest sports rivalry in the world. I have never shouted so much as at the 2005 NCAA men's basketball game when UNC was down by 9 points with just a few minutes to go, only to come back and win. I still have the ticket in mv wallet.'

SALLIE KRAWCHECK, OWNER OF ELLEVATE NETWORK AND A 1987 GRADUATE OF UNC





JAPAN'S LARGEST AND MOST COMPREHENSIVE WIRE SERVICE FOR BUSINESS & FINANCIAL NEWS

The NIKKEI/DOW JONES JAPAN REPORT is a wire service provided by Nikkei Inc., Japan's leading business news and information organization, in collaboration with Dow Jones & Company. Nikkei's namesake newspaper is the world's largest financial daily, with a circulation of more than 3 million, and is widely read by the nation's business executives and investors. Supported by a combined network of more than 1,500 journalists, the NIKKEI/DOW JONES JAPAN REPORT provides 500 to 700 articles daily in English, including market-moving exclusives on corporate earnings, mergers and acquisitions, economic and monetary policy, key regulatory changes, and interviews with top executives.





THE FITTEST MEN ON WALL STREET

For the past two years, **Mark Rubin**, right, and **Jay Li** have finished first and second, respectively, in the Wall Street Decathlon, a fundraiser for Memorial Sloan Kettering Cancer Center. Both men are so committed to the cause that they train five or six days a week year-round. The event is grueling. "It starts with a 400-meter run," says Rubin, who's looking to four-peat, "and you never recover after that." The two were set to face off on June 14 to once again determine who deserves the title of "Wall Street's Fittest Man." *thedecathlon.org*



GOLDMAN SACHS VS. MORGAN STANLEY ALI VS. FRAZIER BILL GATES VS. STEVE JOBS

YOU VS. THE MARKET THE ONLY RIVALRY THAT MATTERS.







Since 2007, AR Capital has constructed alternative investment programs which have delivered significant returns and liquidity to hundreds of thousands of investors.

Mitigate risk. Increase current return. Fortify portfolios with alternative investments from AR Capital.

MEN IN BLACK

CARVING UP THE UNIVERSE

Steve Schwarzman and Larry Fink were partners before a bitter split early in their careers. Now, their dominant firms, Blackstone and BlackRock, are getting into each other's business.

BY JASON KELLY AND KATHERINE BURTON

TO UNDERSTAND HOW Steve Schwarzman and Larry Fink, one-time partners who had an ugly breakup two decades ago, today compete for attention among the most-powerful people in business and finance, consider the events of a few days in mid-April.

Schwarzman's Blackstone Group, the world's largest alternative asset manager, announced on April 10 that it would pay \$14 billion for a portfolio of properties General Electric wanted to shed. The largest real estate transaction since the financial crisis, this deal not only cemented Blackstone's standing as the biggest landlord on the planet. It also underscored how Blackstone's financial clout and real estate savvy made it



the buyer someone like GE's Jeffrey Immelt would turn to in the midst of a restructuring.

Fink and BlackRock, which has become the largest traditional money management firm since being shed by Blackstone, were the ones in the news on April 14. In a letter to the heads of every company in the Standard & Poor's 500 Index, Fink, 62, warned about the growing influence of activist shareholders and the dangers of short-term thinking. His missive, written in the plain, direct language he's known for, showed how Fink is a leader among global investors—and a tough man to ignore, given his firm's \$4.8 trillion.

Such days aren't even extraordinary for these guys. Blackstone's private equity arm owns companies that employ some 600,000 people, giving Schwarzman, 68, a unique window on the economy. One of the 10 richest Americans in the financial industry and a generous Republican donor, Schwarzman has been called on to advise presidents and congressional leaders. Fink, as overseer of retirement funds for teachers, cops, firefighters, and millions of retail investors, casts himself as a voice for savers. A Democrat, he has provided counsel to central bankers and heads of state, and is quick to mention these interactions in conversation. Fink's name was raised when President Barack Obama was looking for a new U.S. Treasury Secretary in 2012.

"They have fabulous platforms that create a megaphone for them," says James B. Lee Jr., the vice chairman and legendary dealmaker at JPMorgan Chase, who's friends with both men. "That gives them considerable voice within both business and political circles." Their megaphones are only getting louder as Blackstone and BlackRock gather more assets, expand into new activities, and extend the leads they enjoy over their closest competitors. And now, they're getting into each other's business.

Blackstone and BlackRock say they aren't direct rivals. Schwarzman, when the topic is raised, says his company and Fink's overlap very little, though he also says change is constant in his world. "It's a business without patents," he says. "Innovation is a requirement." Blackstone President Tony James says it's always possible that BlackRock could buy one of his direct competitors in the private equity field, though he knows of no such plans.

Fink, through a spokesman, declined to be interviewed for this article after being told it was for a rivalry-themed issue. Black-Rock co-founder Ralph Schlosstein, who left in 2007 and now runs the investment bank Evercore Partners, says Fink worries not at all about Blackstone: "They are in completely different businesses."

On the surface, this is true. In the decades since the breakup, BlackRock has grown by

that his firm was the world's most profitable public asset manager.

Just because past successes have been on parallel tracks, however, doesn't mean the search for growth isn't forcing the firms to cross paths. Fink has been making forays into private equity, hedge funds, and real estate. In 2009, BlackRock hired Matthew Botein to be co-head of this alternatives business, which now manages \$113 billion. Bo-

Schwarzman says of Fink: 'I have enormous admiration for him.' And he calls the decision to let BlackRock go a 'heroic mistake.'

managing money for pension funds and retail investors. It runs the world's largest collection of exchange-traded funds. It invests primarily in stocks and bonds and is almost always long-only. Blackstone, on the other hand, has become a \$300 billion giant in the world of alternative assets—private equity, hedge funds, and real estate—serving institutional clients almost exclusively.

Each firm has become so dominant that it essentially defines the category it inhabits. BlackRock doubled its assets twice in the past 10 years, a remarkable feat when the numbers are in the trillions. Growth has come organically and through well-timed acquisitions. BlackRock bought Merrill Lynch & Co.'s fund management unit in 2006 and Barclays Global Investors in 2009, which catapulted the firm into ETFs.

Blackstone, which turns 30 this year, has trounced its closest competitors. Its \$48 billion market cap is roughly equal to all of its publicly traded private equity peers combined, including KKR, Carlyle Group, and Apollo Global Management. Margins are higher in the alternatives realm, so Blackstone's operating profit exceeds Black-Rock's, even though Fink's pool of assets is an order of magnitude larger. After reporting 2014 adjusted income of \$4.3 billion, about \$1 billion more than BlackRock, Schwarzman boasted in a letter to investors

tein once worked for Blackstone. Both firms eye the huge opportunity in serving individual investors who, in the U.S. alone, control some \$14 trillion in retirement savings. In the past two years, Blackstone has launched two mutual funds, which invest in hedge funds and have collected \$3 billion in assets. The firm is also offering private equity and real estate funds for wealthy retail investors and has created publicly traded credit funds.

"You're seeing the traditional and alternative managers bump into each other," says Rob Lee, an analyst at Keefe, Bruyette & Woods who follows Blackstone and BlackRock

Once upon a time, of course, Schwarzman and Fink and all of their employees were together in one office at 345 Park Ave. in New York. The shared history of Blackstone and BlackRock is the stuff of Wall Street legend. Schwarzman and Peter G. Peterson, former colleagues at Lehman Brothers, founded Blackstone in 1985, starting with just \$400,000. They invented a firm name that melded their own names. (*Schwarz* is German for "black," while Peterson comes from the Greek for "stone.") The initial enterprise included merger advice, which was Schwarzman's specialty at Lehman, and the nascent business of leveraged buyouts.

Schwarzman, now ranked 84th among the world's richest people (worth \$13 billion, according to the Bloomberg Billionaires Index), at that time was in pure entrepreneur mode, cribbing resources where he could. He used corporate libraries at friends' investment banks, including First Boston, where his pals Bruce Wasserstein and Joseph Perella

BLOOMBERG TIPS Comparing Blackstone and BlackRock

You can use the Graphical Cross Sectional (GX) function to compare metrics such as priceearnings ratios of the two asset managers and peers. Type **BX US <Equity> GX <Go>** on the Bloomberg Professional service. Type **EQRV <Go>** to use the Equity Relative Valuation function to analyze Blackstone's multiples in relation to those of comparable companies. JON ASMUNDSSON worked. During his visits, he got to know a young employee named Larry Fink. When Fink left First Boston in 1988, Schwarzman and Peterson staked him and Schlosstein with \$5 million to start a fund management shop at Blackstone. In Schwarzman's telling, their business plan was written out on a roll of toilet paper. (BlackRock says it was a roll of paper from an easel.)

Schwarzman grew up in Philadelphia and showed an ambitious streak early. When he was 15, he told his father, who owned a housewares store, that he should expand his business into a national chain. His father rejected the idea, saying he was happy and had all the money he needed. His son couldn't understand such thinking. Fink was raised in Van Nuys, California, the son of a shoe salesman and an English professor. His drive was in evidence by the mid-1980s, when he was one of the pioneers of mortgage-backed securities. Just after his 33rd birthday, he made \$100 million one quarter as a trader and lost more than \$100 million the next—a formative experience and an episode that led to his eventual departure from First Boston.

Fink, who has a professorial demeanor, and Schwarzman, who is more bombastic, worked together for about five years. What became known as BlackRock Financial thrived from its earliest days and never

Schwarzman have reconciled, Fink told the *Times*. "I've never heard from any source in the world anything but praise from Steve about who I am and what BlackRock is."

Indeed, Schwarzman says of Fink, "I have enormous admiration for him." And he told Bloomberg in 2013 that letting BlackRock go was a "heroic mistake." And yet people who know both men say their outsize personalities probably made it inevitable that they couldn't coexist in a single organization.

So Schwarzman and Fink are not friends today, but they are friendly and bump into each other often enough on the financial statesman circuit. Politicians woo both men for counsel—and campaign contributions.

On a typical day recently, Schwarzman met with Jeb Bush, the former Florida governor and Republican presidential hopeful. After he walked Bush out, Schwarzman sat for an hourlong interview for this story. Then he was out of his offices and into a black car to go to lunch with New York's Democratic mayor, Bill de Blasio.

Schwarzman has played a political negotiator role at times. At the height of the 2012 showdown between the Obama administration and the U.S. Congress over the so-called fiscal cliff, he was a go-between for the White House and Eric Cantor, then the majority leader in the House of Representatives.

Timothy F. Geithner. When the euro zone was teetering a few years later, BlackRock was an adviser to the governments of Germany, Greece, and Ireland, among others.

"There's a need for a voice for savers," he said in a 2012 interview he did for consulting firm McKinsey & Co. He's also defended the disaffected little guy at times. When Occupy Wall Street protesters were commanding attention in 2011, Fink said that he understood why they spoke out against financial firms.

Fink's letter in April decrying short-term thinking prompted a wide-ranging public discussion—and criticism from activists. Carl Icahn said Fink's position emboldens underperforming CEOs. "A lot of them feel like they can do what they want because of guys like Larry Fink," Icahn said in an interview. As much as Icahn has clout when he invests in a target stock, BlackRock probably has more. The firm votes about 15,000 proxies a year and is often the biggest holder of shares of a given company.

Fink and Schwarzman share the global stage mostly without signs of friction. But in one area, the success of his former partner rankles Schwarzman: market cap. Despite Blackstone's greater operating profit, Black-Rock gets a higher valuation. The gap was about \$11 billion as of early June. Investors give BlackRock a higher price-earnings mul-

'You're seeing the traditional and alternative managers bump into each other,' says Keefe, Bruyette & Woods analyst Rob Lee.

raised additional money. But by 1994, with \$23 billion in assets under management, a split was developing over how to grow the business. The Blackstone principals' stake in BlackRock had already dwindled to 35 percent from 50 percent as Fink offered equity to attract employees. Schwarzman thought that was enough, but Fink wanted to give away more. In the end, they agreed to sell the BlackRock business to PNC Bank for \$240 million. (PNC later spun BlackRock off and remains its biggest shareholder.)

"It was a very bitter divorce. But I don't regret it," Fink said in a 2011 interview with the *New York Times*. "I'm larger," he added, a boast about his assets under management. (While Fink and Schwarzman say they pay little attention to each other's business, executives at both firms can rattle off accurate, up-to-date comparisons of assets, earnings, market value, and other metrics.) Fink and

"The taxpayers were getting a great bargain—the dealmaker of the century trying to cut a deal for the president," says Cantor, who became a vice chairman at the investment bank Moelis & Co. after losing his congressional seat. He says he took half a dozen phone calls from Schwarzman during the fiscal cliff standoff, which ended with compromise legislation at the last moment. Cantor remains in contact with Schwarzman, and he and Schwarzman both attended an off-the-record executive summit in March that helped inform Fink's CEO letter.

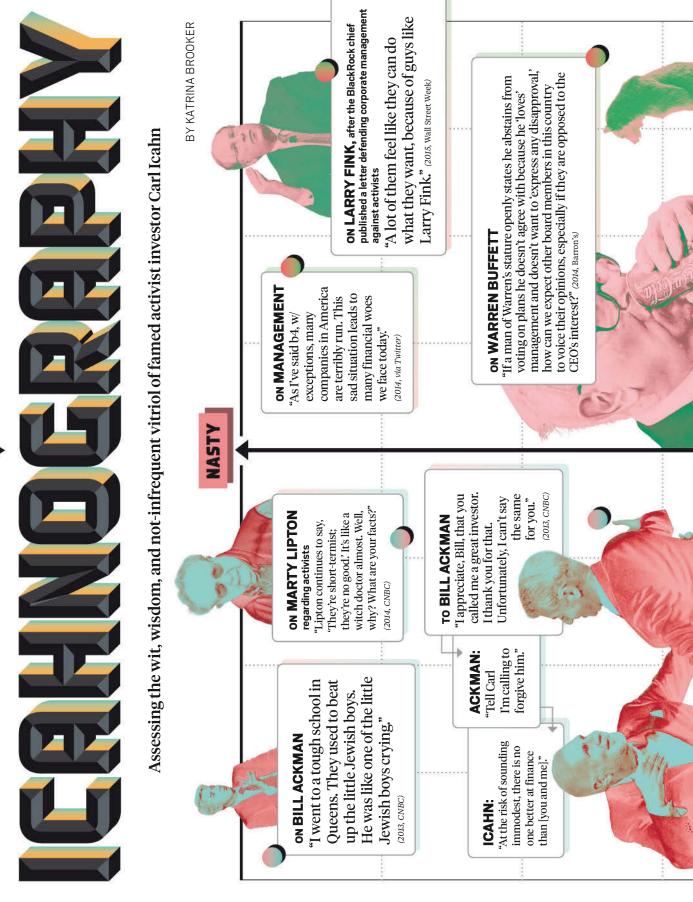
Fink's public role has a different emphasis than Schwarzman's. With his fixed-income background and massive number of clients, Fink weighs in on monetary measures and financial stability issues. During the 2008 financial crisis, he spoke regularly to U.S. Federal Reserve Chairman Ben S. Bernanke and U.S. Treasury Secretary

tiple on the idea that the traditional money manager's earnings are safer and steadier.

Schwarzman complains about this whenever he has the chance. "People have some fear that if we sell things, we will never invest in anything ever again that will make money," he said in May on Bloomberg television. His 30-year track record should dispel such concerns, he said. Blackstone has been catching up with BlackRock of late, which may give Schwarzman solace—or encourage him to keep talking about the matter. Blackstone shares have climbed three times as fast as BlackRock's in the past two years.

"The holy grail for the private equity firms is how do they get the big, long-only manager multiple," JPMorgan's Lee says. For Schwarzman, reaching that loftier valuation might be one way to get over his regrets about having lost BlackRock—and Fink—all those years ago.





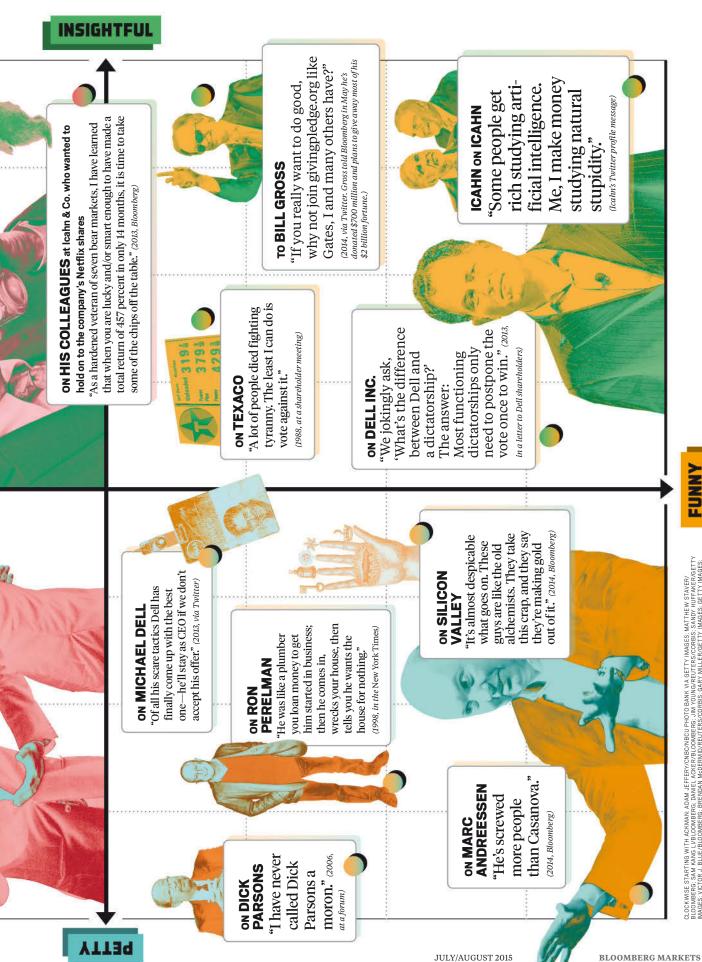


PHOTO SOURCE: ANDREW HARRER/BLOOMBERG

Gross vs. Gross

Bill Gross is here for his favorite doughnut, the cake one with coconut frosting, but he's not going to get it, not today. Jacketless under the Southern California sun, Gross ducks beneath the black umbrellas outside Rose Bakery Café, south of Malibu, looking every bit the merry old bond king. A royalblue tie, with a cheerful pattern of white birds, is draped around his open collar like a Renaissance chain of office. His Mercedes sits hard by.

But make no mistake: *This* Bill Gross, the one eying the French crullers, isn't *that* Bill Gross, the one who bent markets to his will at Pacific Investment Management Co., who built one of the most enduring track records in bond management history, who moved markets with his pronouncements. That old Gross wanted fame more than power and riches, and he wanted it with a hot eagerness that made enemies. By the time Pimco cast him out, he was considered by colleagues—there's no way to sugarcoat this—to be a world-class ierk who'd lost his touch.

The Bill Gross at this bustling cafe off the Pacific Coast Highway, it must be said, is a lot like that other one. He, too, has more money than he knows what to do with. (He's vowed to give away his entire \$2 billion fortune.) He, too, has an enviable job managing money, this time at Janus Capital Group. And he remains a rock star, one who makes ears prick up when he chirps on anything from the German bund to U.S. Federal Reserve interest rates.

But this Gross is searching for something even more elusive than fame and fortune. He's looking for redemption, even a kind of love. At 71, he feels the weight of time. He figures he has a few good years left to prove the new Bill Gross is every bit as good as the old one. Maybe even better.

The best investors, Gross says, are "people that are so needy, it's never enough." He's talking about himself, too: "It's a neurotic quest for love."

In this milieu, what Gross means by *love* is about as romantic as a bond table. He means

At Pimco, Bill Gross built a reputation as the world's best bond trader. Now, at Janus Capital, he's managing a much smaller fund—all while being measured against his younger self.

investment performance and the acclaim it brings. He was Pimco's brightest star—until September, when he suddenly found himself looking in from the outside of the firm he co-founded in 1971.

These many months later, Gross is still coming to grips with what happened. He feels better than he did in December, which was a real low point, he says. But he misses the love. His wife, Sue, keeps telling him to get over himself.

But Bill Gross refuses to bow to anyone—least of all Bill Gross. These days, he spends a lot of time looking over his shoulder. Every day at 3 p.m. California time, he checks the daily performance of Pimco's bond funds—the funds he used to manage—to see how he's stacking up. "I have a happy night if I'm doing better and a not-so-happy night if I'm not doing better," Gross says.

His nights have been rough of late. Since he took over the Janus Global Unconstrained Bond Fund on Oct. 6, it's lost 0.8 percent as of June 1, ranking it behind 78 percent of similar funds—including the comparable Pimco Unconstrained Bond Fund, with its return of 0.9 percent.

Most mornings, as he has for years, he comes to the cafe for his favorite doughnut and a coffee. But on this particular May afternoon, his favorite coconut variety is sold out. Figures. The bond king settles for a cinnamon twist and a carrot juice.

Nowadays, Gross's flyspeck empire pales next to the \$1.6 trillion Pimco. He manages \$1.5 billion—less than 1 percent of what he used to—and much of that money is his own. He works out of a sparsely populated building in Newport Beach, not far from his former headquarters. His entire operation—Gross and four support staff—could fit into a conference room at Pimco.

Gross insists he's not trying to build another Pimco. He doubts anyone could. And he readily admits he never had much interest in the day-to-day grind of managing people. "I just wanted to run money and be famous," he says. That no one could replicate Pimco—and Gross's decades there—is what makes what he did so extraordinary, he says. "I was always that way; I will go to the extreme to be special," Gross says.

Ever since he was young, Gross says, he has tried to do things others couldn't or wouldn't do, such as spending three months at Las Vegas blackjack tables—16 hours a day, seven days a week—or running six marathons in six days. "Pimco was that in the extreme; nobody's done this before, and nobody's going to do this again," he says.

Post-Pimco, Gross is trying to keep up appearances. He's doing regular television and radio spots. (He was a fixture on financial TV while at Pimco, which placed cameras on its trading floor for him.) And he's writing a monthly investment outlook similar to the one he did at Pimco.

He also seems keenly aware of his stage in life, even likening himself to the aging NBA legend Kobe Bryant, who, like Gross, is approaching the twilight of his career, with all the mental and physical baggage that comes with the territory.

Gross's new boss at Denver-based Janus, CEO Dick Weil, calls him that company's Peyton Manning, referring to the Denver Broncos quarterback known for his presnap histrionics and Jedi knight cool. That comparison may be apt. Manning once said: "I would like to think I will be the guy who knows when it's time to stop. I don't want to be a guy who hung on and hung on."

Gross gets that. "If you can be actually honest with yourself, which I don't think anybody can ever be, there comes a point where you would know, hopefully—to be crass about it—that you're losing it, that you're making mistakes, you're not as focused as you used to be," he says. "That hasn't come yet, but I know that happens to

BLOOMBERG TIPS Comparing Bill Gross's Funds

Type **JUCIX <Equity> PORT <Go>** on the Bloomberg Professional service to run the Portfolio & Risk Analytics function on the Janus Global Unconstrained Bond Fund. Click on the arrow to the right of Vs and select [More Sources ...]. Click on Funds/ETFs/13Fs, enter *PTTRX*, and click on the Pimco Total Return Fund and then on Select. Click on the Performance tab. JON ASMUNDSSON



people in their 70s and 80s. That's how the cookie crumbles. So far, I think I'm OK."

Gross sits at the table and stares at his cinnamon twist. He takes a nibble. Finally, he wraps the rest in a paper napkin and tosses it into the garbage can.

Gross is thinking about Pimco again. "I should know better," he says. "I'm a wimp. I didn't stand up for myself." He goes on: "It's like an alcoholic. You never stop believing people will like you if you concede this and concede that."

A young man behind the counter recognizes him. Turns out, the kid has an internship at Morgan Stanley and says he's coming to hear Gross speak at an upcoming event.

"Well, come up and say hi afterwards," Gross tells him. "Don't listen too closely." вм

BARRAGED BY INVESTMENT firms eager to manage their life savings, many Americans are making their choice—for nobody. They're shrugging off investment advisers altogether in the hunt for lower costs. So fund giants Vanguard Group and Fidelity Investments are trying to win them over—with robots. The rivals, which have a combined \$5.4 trillion in assets under management, are escalating the competition for customers in a new frontier known as robo-investing. Robo-firms use algorithms to design portfolios based on questions clients answer online. These portfolios will more than triple to as much as \$60 billion in 2015 from about \$16 billion at the start of 2014, Boston researcher Aite Group predicts.

Robo-startups Wealthfront and Betterment are sparking this latest race to the bottom in fees, a contest Vanguard kicked off with index funds 40 years ago. This time, companies are pitting machines against humans to reduce the cost of advice. "This is the new rivalry," says Alois Pirker, a research director at Aite.

Vanguard has an ally in Palo Alto, California–based Wealthfront. The company's algorithms direct about 90 percent of the average portfolio to Vanguard funds. The firms don't have a financial relationship, and they're chasing different markets. Yet their CEOs praise each other's strategies. "I'm a big fan of what's happened in the robo-world," Vanguard CEO Bill McNabb says.

Vanguard unveiled its own robo-like offering in May, called Personal Advisor Services, for customers with at least \$50,000. It targets retirees, or near retirees, compared with the millennials who flock to robo-startups. Vanguard's algorithm looks at age, risk tolerance, and other attributes it gleans from an online questionnaire.

The client speaks with an adviser before finalizing the investment plan. Vanguard, located outside Philadelphia, charges a relatively puny 0.3 percent of assets annually on top of the fees for its funds. Traditional advisers can take 1 percent or more.

Fidelity is embracing the robo-product route via the 3,200 independent advisory firms for which it clears trades and holds about \$1.5 trillion in assets. Boston-based Fidelity teamed up with No. 2 robo-firm Betterment in October to steer those advisers toward Betterment's software. The robo-programs pick portfolios, often based on Vanguard funds, and automatically rebalance them to cut time and costs. Fidelity gets a referral fee, which it won't disclose, from its New York-based partner. "Financial firms can no longer wait for the emerging affluent to appear at their doorstep when they have enough assets," says David Canter, who heads a Fidelity unit serving independent advisers. "You have to think about them now."

Fidelity, which built its business on funds that try to beat the market, says it doesn't currently plan a robo-product for retail investors. It already has funds that automatically rebalance and online tools to build a portfolio. Its advisory services cost from 0.55 percent to 1.7 percent depending on the amount of assets a customer has.

In the rising robo-rivalry between Fidelity and Vanguard, the winner may be ... Charles Schwab Corp. The largest independent U.S. brokerage by client assets started a robo-offering for retail investors on March 9. By the end of May, the new program had \$2.4 billion in client money and about 33,000 accounts. "The pressure is on," Aite's Pirker says.

TRANSFORMERS

Rumble in Robo-land





Better Insights = Better Investments

Save Time and Money

Instant access to traditional, novel and proprietary data + intelligent analytics

Smarter Due Diligence

Greater depth and quality of information

Real Time Monitoring

Information you want, when you need it

Relationship Mapping

Triangulate multiple sources to discover + track manager and investor network affiliations

getAltX.com/try



THE BAD THING HAS AGREADY HAPPENED

EMC IS ONE OF THE WORLD'S LARGEST MAKERS OF DATA STORAGE SYSTEMS.
LIKE OTHER COMPANIES, IT'S ALSO
BEING HACKED WITH ALARMING
FREQUENCY. MEET THE TEAM FIGHTING
BACK—BEFORE IT'S TOO LATE.

BY MICHAEL RILEY

AS COLORFUL SLIDES FLASH ABOVE HIM

on a large screen, Garrett Schubert is talking quickly. It's a habit he's picked up on a job in which speed is the difference between stopping a computer network breach or getting there after the data is already gone.

Schubert and I are in a large, second-floor conference room, behind three locked security doors. Located in an innocuous glass-and-concrete building in a wooded suburb northwest of Boston, the conference room is deep inside EMC's Critical Incident Response Center.

EMC, one of the world's biggest makers of data storage systems, is a particularly juicy target for cyberspies. With revenue of \$24.4 billion last year, the company is a Big Data icon, the leading provider of products and services for mass storage and analysis. Intruders see EMC as a potential gateway to the secrets of banks, technology companies, casinos, power plants, militaries, and governments. Every day, devices protecting EMC's 60,000 computers register 1.2 billion "events," a broad term that includes probes by hackers

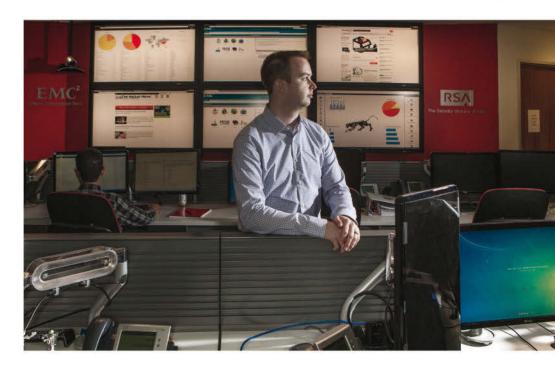
looking for vulnerabilities to exploit later. Between 60 and 80 of those events are serious enough that they're assigned to someone on the incident response center's 28-person team for action. About eight times a year, a breach is elevated to what EMC calls internally a "declared incident." It's the corporate equivalent of DEFCON 1. Hackers have been identified inside the network, possibly already stealing data. The company makes almost none of those white-knuckle events public.

EMC executives have agreed to lift the veil on their computer security operations, and sandyhaired Schubert-who hunts for hackers in EMC's computers as the center's manager-is my guide on a recent afternoon. His slide deck comes to a finale with details of a previously undisclosed attack in 2014 by nation-state cyberspies.

It was a stunningly complex operation. The hackers infiltrated a Korean-language news site, which an EMC engineer in South Korea had visited, infecting his laptop with sophisticated malware. When the engineer plugged his computer into the data centers of sensitive clients during his regular visits, the malware could have possibly jumped across the connection. EMC believes one of those clients, possibly linked to the South Korean government or military, may have been the intended target.

Schubert pauses to let that sink in: The hackers had to know something about the reading habits of a midlevel EMC employee and were willing to hack two other companies to get the data they wanted. "Some of these bad guys are brilliant," says Schubert, 34. "The code that they write. The way they manage large compromised systems. I admire someone who makes my job difficult."

Schubert and his colleagues face their adversaries from the confines of a 30-by-20-foot (9-by-6-meter) room—known as a security operations center, or SOC-where data from the company's global computer network is piped to analysts who staff the center and a twin facility in Bangalore, India, around the clock. Next door to the SOC



is the conference room with a mini-fridge in the corner and a large display screen on one wall. During declared incidents, managers are able to project data related to the crisis onto the screen. The space becomes a war room populated by a team of as many as 40 people, including the company's general counsel and chief information officer, who are responsible for regularly briefing the board of directors.

The seriousness with which EMC takes those incidents shows that corporations are awakening to the huge vulnerabilities in an age when all our secrets are on servers somewhere, an awareness that has grown rapidly during the past 18 months.

The recent string of grim headlines in that time, involving Target, JPMorgan Chase, Anthem, and Sony Pictures, gives the impression of devastating, one-off attacks. Target, which was raided by hackers in December 2013, was also equipped with an SOC and high-end technology and, in fact, spotted the malware on its computers almost immediately. The alert lingered in an analyst's work queue for several days, long enough for the hackers to remove 40 million customer credit card numbers. The company's CEO resigned five months later.

In reality, what U.S. companies and their defenders, including EMC's Schubert, are facing isn't open warfare. It's a siege.

EARLY ON A MONDAY MORNING IN

April 2014, an EMC analyst working in the SOC stumbled onto an intruder's faint digital footprint. It's known among security experts as a web shell—a piece of computer code that gives hackers autonomous control over part of the network. This one was planted on a single server in one of EMC's West Coast data centers. It took the global security team less than 30 minutes to declare an official security incident.

That decision was based less on the where than the who. There are all sorts of hackers. Criminals are after money. Competitors may target EMC's product designs. But the ubiquity of EMC's hardware makes the company a target of hackers in the employ of rival nation states. Knowing how EMC's systems are designed or obtaining the source code can allow hackers to penetrate them once they're inside the data centers of hospitals, banks, power plants, and military facilities. In the coming era of cyberwar, EMC sits squarely on contested terrain.

The web shell spotted by the EMC analyst was traced to one of about a dozen groups that most worry James Lugabihl, head of EMC's Critical Incident Response Center and Schubert's boss. He has his own rather ominous nickname for them:

BLOOMBERG TIPS Tracking Cybersecurity

You can use the Bloomberg Intelligence dashboard on emerging technologies to find research on cybersecurity. Type BI ETECG <Go> on the Bloomberg Professional service and click on Cybersecurity. For an ETF that focuses on cybersecurity, type **HACK US <Equity> DES <Go>**. Click on Holdings and type 7 <Go> for a list of companies the fund invests in. JON ASMUNDSSON

SOME OF THESE BAD GUYS ARE BRIGGIANT. I ADMIRE SOMEONE WHO MAKES MY JOB DIFFICULT, SAYS EMC-5 GARRETT SCHUBERT

the Immortals. Employed by various nation-states, those 12 or so groups are the most closely tracked by EMC's security team because of the enormous damage they can do in just a few hours. "When it comes to these guys, we aren't going up against a double-A farm team," Lugabihl says. "These guys are major-league."

As the security team watched, beginning in the early hours of April 21, 2014, the intruders repeatedly signed onto the server, performed a few commands, and left again. It looked like the hackers were in the early stages of their operation, Lugabihl says, but the team's members needed to be sure. After some deliberation, they made a decision: They'd let the hackers work so that EMC's analysts could learn more.

Although it's not an uncommon tactic, it's a nerve-racking one. "It's the right thing to do, but the board of directors is still going to look at you like you're crazy," says David Martin, EMC's chief security officer, whose relaxed manner suggests an unnatural calm compared with the hubbub around him. If the team were to miss something crucial, the hackers could bag the crown jewels while the defenders were looking the wrong way. "It's

THE COMPANY SEES

BILLION
'EVENTS' ON ITS
60,000 COMPUTERS
EVERY DAY.

like catching someone in your house stealing the silver in the dining room," says Martin, "but you decide to let them keep going because it may lead you to the fact that there is also someone in the office rifling the safe."

After two days, the hackers tried to remove data from the network but were halted by additional safeguards the defenders had by then put in place. By April 25, the team's members decided they'd seen enough and shut down the server.

Even with all the preparation, it was an anxious week, Lugabihl says, filled with the kind of tension that pervades this line of work. "When the adrenaline wears off, you can literally just see people collapse," he says. The company carefully monitored the network for another 60 days before EMC finally determined it had thwarted the attack.

EMC HASN'T ALWAYS BEEN SO FORTU-

nate. In 2011, Chinese hackers infiltrated the servers of the company's security division, RSA, and stole information related to a product widely used by banks and governments to protect their own data. EMC executives squirmed as the media rolled out details of the hacking of a company paid to fend off hackers, potentially leaving some of its most important clients vulnerable to further attacks. After that, EMC's approach to security was completely revamped. "We had to change our whole mentality," Schubert says. "We honestly built our team not thinking that nation-states would ever target a place like EMC or RSA."

Schubert, Lugabihl, and their colleagues know the intruders have most of the advantages. The more than 100 experts who cumulatively work on computer security at EMC have to be right every day, all day; their opponents have to be lucky only once—and are usually far better than that. "Our products and services are used in just about every part of critical infrastructure around the globe," says Martin. "By its very nature, that puts us in the crosshairs."

Although none of the defenders have ever met their adversaries, they do get to know some of them. Hackers have personalities that show up in the tactics they use—their digital habits, if you will. It's like playing a high-stakes game of chess with an opponent sitting a continent away. That doesn't mean they're content to play nice. Schubert tends to speak in the language of the battlefield. Corporate secrets are "high-value targets"; hacking programs from random criminal attacks are "stray rounds."

While the Immortals are the adversaries that most worry Schubert, they aren't the only ones. Criminals have created a sophisticated hacking supply chain that rivals those of some nation-states. Russian malware engineers sell their wares to Ukrainian hackers, who buy space on hijacked servers from the Dutch criminal underground.

Much of what cybercriminals do is automated and aimed at stealing easily convertible data such as credit card numbers to maximize their take. One, in January, involved hundreds of EMC employees who received malware-laden e-mails to their corporate accounts. The company's spam filters are designed to stop such attacks, so the hackers sent 23 different formats of the same e-mail to each account, slightly altering each in order to make it through the company's digital defenses. But this particular malware also stole users' security certificates, digital keys that identify them to other entities on the Internet as legitimate EMC employees. Those certificates could be sold later to sophisticated hackers or spies, making this attack more dangerous than the average criminal caper.

The company's retooled approach to security is especially apparent when it comes



to declared incidents, each of which is given a code name. In 2011, they were all the names of animals. Last year, in a nod to variety, the incidents were named for characters in HBO's *Game of Thrones*. The April 2014 incident was called Daenerys Targaryen, or DT for short. The Korean attack was Eddard Stark.

It would have been easy for Schubert's team to miss the Eddard Stark hackers. An analyst who had a few spare minutes was scanning outbound connections from company computers to the Internet and spotted something wrong. A laptop in South Korea was connecting to a site called mooo.com, which had been tagged by the intel team as dangerous.

The team worked quickly after spotting the connection, the past several months of preparation paying off. Typically, the defenders would have had an infected laptop shipped to Massachusetts by plane to examine the hard drive. But EMC had begun to install a tool on company computers that allows its engineers to make the analysis remotely. "We have narrowed down a 12-hour analysis to 10 or 15 minutes," Schubert says.

That didn't give the hackers enough time to burrow into the company's main network. After examining the laptop more carefully, though, the team found evidence that a file of documents had been removed, which could include sensitive information about clients.

Worse still, the engineer had spent two days working remotely prior to plugging into EMC's network, when the breach was ultimately detected (engineers often work remotely, logging into clients' networks as part of the job). The company contacted those clients to discuss the situation; Martin says those conversations are among the most difficult in his line of work. "Imagine sitting in front of your customer and explaining that you thought so little of them that you put their data at risk," he says.

Schubert concedes that his team, as hard as it works, won't always win. There are simply too many hackers, and they have far too many advantages. The best the defenders can hope for is to limit the damage.

"When I started in my career, the idea was, we wanted to stop a bad thing from happening," Schubert says. "Now, we assume that the bad thing has already happened. Every single day, we walk in and we assume there is an active attack going on."

BY MICHAEL P. REGAN

CAPE CRUSADERS

The S&P 500's P/E Is 19.

Or Is It 27?

"Stocks are cheap!" "Stocks are expensive!" It's one of the oldest debates on Wall Street—and an especially good way to divide investors into competing camps as the U.S. bull market soldiers on in its seventh year.

Each side needs evidence for its arguments, of course, which leads us to competing versions of the price-earnings ratio. The more mainstream metric simply divides the level of an index by the past year's earnings per share for member companies. A more complex measure of how rich stocks are getting divides the index level by average earnings over 10 years. Yale University economics professor Robert Shiller calls this the CAPE ratio, which stands for cyclically adjusted price-earnings. Others simply call this 10-year version the Shiller P/E for the man who made it famous-the author of the book Irrational Exuberance, which came out in 2000 after an exuberant period that pushed the CAPE ratio to an all-time high.

The difference in methodology may sound minor, but the rival approaches yield drastically different results—especially now, after a decade that includes an economic crisis that decimated earnings. The Standard & Poor's 500 Index P/E is 19 as of early June, based on the E for the past year. The index's Shiller P/E is above 27.

What to make of Shiller's CAPE ratio is controversial—even among supporters. A report from Russell Investments says it shows that the market is "outright expensive" versus a long-term average of 16. Investor Jeremy Grantham, cofounder and chief investment strategist

at Grantham, Mayo, Van Otterloo & Co. in Boston, says one should look at the CAPE ratio's average value of 24 since 1987. (That's when Alan Greenspan became U.S. Federal Reserve chairman, a marker Grantham uses as the start of the current era for stocks.) So the U.S. market's not at bubble levels yet, according to Grantham.

Money manager Laszlo Birinyi prefers the one-year P/E. The CAPE ratio has never flashed a clear buy signal, he says, not even in 2009, at the end of the last bear market, when it was still above its long-term average. "At the threshold of a market which to date has gained 200-plus percent, it was a less than inspiring message," he wrote in March.

Can Shiller himself settle this debate? Nope. He sort of shrugs and throws up his hands. He says the ratio that bears his name has made the market look expensive for a while, spurring some pundits to give pretty bad advice. Record-low interest rates around the world are rendering some long-held financial theories useless, he says.

"I've been very wary about advising people to pull out of the market even though my CAPE ratio is at one of the highest levels ever in history," Shiller told Bloomberg in April. "Something funny is going on. History is always coming up with new puzzles."



Are you Vanguarding® your clients' portfolios?

Giving your clients the exposure that comes with investing in international fixed income just got a little easier. VWOB ETF specializes in emerging markets government bonds and has an expense ratio that's 31% lower than the industry average," making it the lowest in its category. So wherever your clients' goals take them, there's an International Bond ETF that can help them get there.

Extend your clients' reach at advisors.vanguard.com/VWOB today. 800 505-7182



All investing is subject to risk, including the possible loss of the money you invest. The Emerging Markets Government Bond ETF is subject to the risk that an issuer will fail to make payments on time, and that bond prices will decline because of rising interest rates or negative perceptions of an issuer's ability to make payments. The ETF seeks to track the performance of an index that measures the investment return of dollar-denominated bonds issued by governments of emerging market countries (including government agencies and government-owned corporations). It is subject to risks including country/regional risk, which is the chance that political upheaval, financial troubles, or natural disasters will adversely affect the value of securities issued by foreign governments, and emerging market risk, which is the chance that bonds of governments located in emerging markets will be substantially more volatile and substantially less liquid than the bonds of governments located in more developed foreign markets.

To buy or sell Vanguard ETFs, contact your financial advisor. Usual commissions apply. Not redeemable. Market price may be more or less than NAV.

For more information about Vanguard ETF Shares, visit advisors.vanguard.com/VWOB, call 800 505-7182, or contact your broker to obtain a prospectus. Investment objectives, risks, charges, expenses, and other important information are contained in the prospectus; read and consider it carefully before investing.

*Source: Morningstar as of 05/01/2015. Based on 2015 industry average expense ratio for emerging market ETFs of 0.49% and Vanguard Emerging Markets Government Bond Index Fund ETF expense ratio of 0.34%. The next lowest expense ratio is 0.47%.

There may be other material differences between products that must be considered prior to investing.

© 2015 The Vanguard Group, Inc. All rights reserved. U.S. Patent Nos. 6,879,964; 7,337,138; 7,720,749; 7,925,573; 8,090,646; and 8,417,623. Vanguard Marketing Corporation, Distributor.



Follow us @Vanguard_FA for important insights, news, and education.

And Then There Were Two

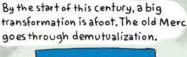
By John Lippert Illustrations by Chi Birmingham

















Jeff Sprecher of ICE buys London's International Petroleum Exchange in 2001 to compete in oil trading against the New York Mercantile Exchange (which later sells itself to CME).





Terry Duffy of CME agrees in October 2006 to buy the Chicago Board of Trade, his biggest cival in financial derivatives.



ICE makes a counterbid—gets a bellboy to slip the offer under the door to CBOT executives at a Boca Raton resort during a big futures industry conference.



It was us getting our teeth kicked in,



Duffy said later, according to Erika Olson, author of a book about the derivatives exchanges. But CME fights back and gets its \$11.3 billion deal with CBOT done.

Sprecher's transformative deal comes in 2013, when he buys NYSE Euronext. That gives ICE the famous (but increasingly irrelevant) New York Stock Exchange trading floor and, more important, Europe's biggest derivatives exchange, known as LIFFE.



So ICE and CME have split between them the business of running most of the key exchanges in the U.S. and Europe. Operating profit margins top 50 percent at both companies.



Regulatory changes post-Lehman Brothers have been a boon, pushing more derivatives trades to CME and ICE clearing houses.





Craig Pirrong, a University of Houston finance professor, says it's a concern.

We've gone from the frying pan to the fire.

ICE and CME are responsible for keeping their markets functioning smoothly.



A one-day jump in Treasury prices in October—the second biggest in history, a harbinger perhaps of inadequate liquidity—shows potential problems.



And what about the flash crash?

Yes, it was five years ago, and at the time, CME said algorithmic trading on its exchange played no role.



Then came the arrest of Navinder Singh Sarao in London in April for allegedly manipulating markets, including on the day of the flash crash. He traded CME stockindex futures.



CME was aware of Sarao but hadn't shut him down. He may have been "spoofing," placing and canceling orders to move prices.

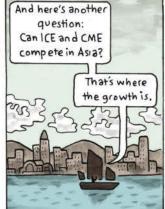


O'Neill.



Sarao once told CME investigators on a phone call, according to the FBI. I've not done anything wrong apart from being good at my job,

Sarao shouts out during an appearance in a U.K. court. CME says it is cooperating with investigations and is committed to combating spoofing.





Hong Kong Exchanges
& Clearing has a bigger
market capitalization than
CME or ICE, Revenue from
one of its stock index
futures contracts topped
\$1 billion last year—equal
to a third of all of CME's
revenue.



I call this profitable coexistence.



As exchanges have transformed since 2000, they've also gone electronic.CME is shulling most of its remaining trading pits in July.

In the world of Europe's dark pools, a new player is poised to make a splash. Plato Partnership, a London-based consortium of asset managers and brokerage houses, is about to take on existing trading venues that don't publish pre-trade price and volume information, including those operated by BATS Chi-X Europe and London Stock Exchange Group's majority-owned Turquoise platform. The prize: the business of trading large blocks of stock for the biggest institutional investors.

Plato's entry into the market comes just as the European Union is changing the rules of the game. Trading in the dark has never been as popular in Europe as in the U.S. Only about 9 percent of European equity volume is traded over unlit venues compared with more than 40 percent in the U.S. EU regulators want to keep it that way. They've drafted new regulations, which come into effect in January 2017, requiring all EU trading venues to post pre-trade bid and offer prices and trading volumes—except for those dealing with "large in scale" transactions; such trades (the size of which has yet to be precisely defined) says Paul Squires, the head of trading at Axa Investment Managers. And while institutional investors generally regard dark pools as preferable to lit exchanges, Squires says, they worry that the operators have too much incentive to quietly allow high-frequency-trading firms into the pool. In January, UBS paid \$14 million to settle a Securities and Exchange Commission complaint that it secretly created an order type for its dark pool that advantaged high-frequency traders over other customers.

In addition, money managers are concerned about conflicts of interest with the brokerages' proprietary trading desks. "All the brokers and all the venues will say you can control the flow you interact with, you can apply minimum execution sizes or resting periods, but they put the onus on the

The new EU rules will force dark pools operated by sell-side institutions to restructure, open up to more participants, and comply with new regulations. Rather than do so, most brokerages are shuttering their dark pools and instead joining consortia like Plato and multilateral pools such as Turquoise. "It gives us the opportunity to design something progressive from scratch," Squires says of Plato. He also likes that Plato—unlike existing dark pools—will be operated as a notfor-profit, with any money left over after expenses committed to academic research into market structure. "That is an important signal to regulators and to clients," he says.

The advent of Plato has the current crop of dark pools eager to emphasize their own buy-side-friendly features. Robert Barnes, Turquoise's CEO, says the company has in

TRADING IN THE







Underthe-radar exchanges in Europe prepare to face a potent new challenger.

BY JEREMY KAHN

buy side to do that," Squires says of existing venues. "The buy side doesn't have the capacity to do that effectively in such a complicated marketplace."

It's a point Norges Bank Investment Management, which oversees Norway's \$890 billion sovereign wealth fund, made in a research paper published in April. From an asset manager's perspective, Norges said, there would ideally be only one dark pool.

This explains why Axa and Norges have gotten behind Plato, which is also being backed by Deutsche Asset & Wealth Management, Fidelity Worldwide Investment, Union Investment, J.P. Morgan Asset Management, and a group of sell-side banks, including Citigroup, Goldman Sachs, Barclays, and UBS.

place a working group of money managers helping to shape its future. And Mark Hemsley, head of European business for BATS Chi-X, which runs Europe's two largest dark order books by total trading volume, says his firm gives investors the liquidity they need to complete large orders quickly. Still, he's monitoring Plato. He says a potential problem with block-trading venues like Plato is that they'll fail to match buyers and sellers, especially at times when the whole market is moving in one direction.

For all the saber rattling, Plato's relationship with the other dark pools is more "frenemy" than pure foe: The upstart pool is looking for a company to build its new trading platform. Among the leading contenders: BATS Chi-X and Turquoise.

will be exempt. That means if dark pools want to keep the lights off and stay in business, they'll need to grab market share in big equity orders. Trading such big blocks of stock without tipping off other traders was the reason dark pools were first created, beginning in the 1980s. But over time, that original promise got diluted.

The problem with dark pools in existence today is that regulators don't trust them,



195 countries on earth. People from 161 have come to us for world class care.

Same-day appointments available.



Every life deserves world class care.

Call 1.844.854.CARE clevelandclinic.org/care

THE REAL GROWTH AREA IN U.S. FINANCE IS COMPLIANCE. THAT'S DEFINITELY A BUMMER FOR PEOPLE TRYING TO MAKE MONEY. IS IT ALSO BAD FOR THE ECONOMY?

BY ANTHONY EFFINGER

TO HEAR JAMIE DIMON TELL IT, regulation and the cost of compliance are becoming a threat to the American dream.

"In the old days, you dealt with one regulator when you had an issue, maybe two," the JPMorgan Chase CEO said on a call with investors in January. "Now, it's five or six. It makes it very difficult and very complicated. You all should ask the question about how American that is."

Several tax brackets down from Dimon,

Justin "the Compliance Guru" Hall is betting that Dimon's scourge will, by contrast, ensure his own upward mobility.

Hall, 28, is a compliance officer at Charles Schwab Corp.'s retail bank. He and thousands of others like him, at every company in finance, are charged with keeping their revenue-obsessed colleagues on the right side of the rules. Compliance, not banking, has been the real growth business since 2008, when



free-market liberties turned to liabilities and markets collapsed.

Hall, who uses the self-awarded "guru" designation on his LinkedIn profile, couldn't be happier with his choice of career. "There's definitely no shortage of opportunity," he says. "You're usually involved with all the big dogs in the company. Your visibility is huge."

Dimon, meantime, seems grumpy. Sections of a letter he wrote to shareholders in

April sound like they were penned by Ayn Rand's ghost. He complains about wasting face time with investors discussing regulation. "Very little time is spent talking about the actual business, like client transactions, market share gains, or other business drivers," he writes.

The rivalry between "actual business," as Dimon calls it, and compliance may have started when Leviticus warned against using dishonest weights and scales and withholding a worker's wages overnight. It probably heated up when the ancient Romans began regulating little companies called *societates*. It most definitely intensified in the early 1900s when President Teddy Roosevelt pressed Congress to regulate food, finance, and the rails. Compliance with money-laundering statutes became top of mind for Western governments after 9/11, when the aim became stopping terrorists, not just drug dealers.

Business and regulators fight constantly over compliance, and some of the bloodiest trenches in this war are inside companies, where salespeople see themselves as elephant hunters and tag compliance employees as "internal control freaks" or the "sales prevention team."

"Sales is all about getting a yes," says Darrell Coleman, chief compliance officer at DynCorp International. "My job is to say no." DynCorp, controlled by buyout firm Cerberus Capital Management, is like a temp agency for the hardest jobs in the world. It has trained police forces in Afghanistan and fixed military aircraft in Iraq. It is Coleman's job to make sure no one bribes a defense ministry official to get a contract in, say, Saudi Arabia. "The world runs on baksheesh," he says.

On Wall Street, the task is to stop insider trading, collusion, and money laundering, among other things. And there's been plenty of each. JPMorgan alone has paid a total of \$36 billion in settlements and fines since 2008. Some of the highlights: selling securities constructed from "toxic" mortgages, according to the U.S. Department of Justice (\$13 billion); failing to report questionable activity by Ponzi schemer Bernard Madoff (\$1.7 billion); and, most recently, colluding to rig foreign-exchange rates (\$1.9 billion to a host of regulators).

Compliance types point to these big numbers as proof that hiring a few of their ilk really pays off. JPMorgan has hired 8,000 compliance and control people since the crisis. Employees completed 800,000 hours of compliance training in the bank's mortgage business alone in 2014. (And since his April letter, Dimon has clarified that he has no problem admitting wrongdoing and paying the price for mistakes.)

If you work in compliance, those figures add up to job security. Better yet, regulators are now enticing compliance people with big sums for snitching. In April, the U.S. Securities and Exchange Commission announced a whistle-blower award of at least \$1.4 million to a corporate compliance officer, only the second





one ever. (The first was \$300,000, in August 2014.) The compliance person reported malfeasance, but management didn't do anything to stop it, so the SEC rewarded the tip. No details, not even the company's name,

Cutting loose, compliance officer style, at the 2015 Compliance Week conference in Washington in May

are public, to protect the whistle-blower.

In another era, someone like Justin Hall might have gone into plastics, or semiconductors, to make his fortune. Growing up in Chandler, Arizona, Hall spent half his time living in a trailer park with one of his divorced parents. He sold phone books and magazines door-to-door, then switched to selling phone service for WorldCom, where

BLOOMBERG TIPS Compliance Center

The Compliance Center function lets you access a suite of tools and resources designed for compliance officers. Type **CMPC <Go>** on the Bloomberg Professional service. Type **BI REGU <Go>** for the Bloomberg Intelligence dashboard on regulation. For the Bloomberg Briefs *Financial Regulation* newsletter, type **BRIEF <Go>** 12 <Go>. JON ASMUNDSSON

Complete Prime Broker Turnkey Solution for Hedge and Mutual Funds

that provides trading, clearing, custody, and reporting capability on over 100 market destinations worldwide

Our Hedge and Mutual Fund account is a cost-effective and automated solution for funds of any size.

- Trade stocks, options, futures, forex and bonds worldwide from a single IB Universal Account.™
- Choose a single fund account structure to manage one fund, or a multiple fund account structure to manage multiple funds.
- A User Access Rights system that allows you to assign different managerial roles and client accounts to individual employees within your organization.
- Trades can be given up pre-trade or post-trade to multiple prime locations or taken up from executing brokers. Risk-based Portfolio Margin or Reg T Margin Accounts. Transparent, cost-plus pricing discounted by volume to as low as 1/20th penny per share, 15 cents per options contract and 25 cents per futures contract, eligible for exchange rebates.1 To find out more, contact an IB representative by calling toll free 855-861-6414 or by visiting: interactivebrokers.com/intb **Interactive Brokers** for Institutions

his charm helped him pull down, he says, \$98,000 the year he turned 17. "I have a knack for picking up people's cues." he says.

He got into financial services in 2005 at age 18, right out of high school, through a neighbor who worked at Bank of America and told him about a job there as a credit risk analyst. After a promotion, Hall ended up on a BofA team examining Countrywide Financial and its assets before the bank took a \$2 billion stake in the troubled lender in 2007. That got him into compliance. He went to

in Minnesota to dismiss the complaint, saying such a penalty can't be sought against an individual and that any legal action would be barred by statutes of limitation.

Within companies, attitudes toward compliance are fluid and reflect economic sentiment, according to Pat Harned, CEO of the Ethics & Compliance Initiative, an industry association in Arlington, Virginia. "Culture trumps compliance," she says. "In very good economic times, companies are willing to take risks. In tough economic times, the tone from the top is much different."

of GE Capital and dodge another hated term: *nonbank SIFI*—systemically important financial institution.

Compliance people like Dodd-Frank for obvious reasons. Destree Rickard, managing director at executive search firm Barker-Gilmore in Fairport, New York, says one job candidate claimed to have read all 2,300 pages of the law. "I said: 'I can't place you. You're either boring or lying," Rickard says.

How much companies spend on compliance is anyone's guess, experts say. The field is broad, covering everything from bribery to lending standards. And accounting for the cost is tricky. Do you include the expense of having every employee sit through an hour-long PowerPoint on graft? On the other side of the ledger, how do you measure the benefit of preventing fraudulent activity that didn't happen?

Anti-regulation groups, however, are more than willing to quantify the horrors. The American Action Forum, which calls itself a "center-right" policy institute and is led by Douglas Holtz-Eakin, former director of the U.S. Congressional Budget Office, says gumming up capitalism with Dodd-Frank will cost the U.S. \$895 billion in lost gross domestic product from 2016 to 2026.

The meter really starts to run when prevention fails. After German police raided the offices of Siemens at dawn in 2006, the U.S. government jumped in with charges that the Munich-based engineering firm had violated the Foreign Corrupt Practices Act by paying bribes to win contracts for transit systems in Venezuela, power plants in Israel, and refineries in Mexico. To deal with the matter, Siemens hired a legion of lawyers from Debevoise & Plimpton, who in turn hired

Hyperbolic bankers make GSIB sound like the corporate equivalent of the red A Hester Prynne is forced to wear in The Scarlet Letter.

college, earning a bachelor's degree in project management and finance from the University of Phoenix in 2012 and a master's in management of information systems from Arizona State in 2014. He joined Schwab's in-house bank, based in Phoenix, in October, working on an oversight program for ensuring that third-party vendors comply with banks' risk regulations.

"These people are in great demand," says Maurice Gilbert, founder of Conselium, a headhunting firm in Dallas. Gilbert used to do executive searches for all sorts of positions. "Then, about eight or nine years ago, we got a compliance search," he says. "And then we got another one. And we said, 'Is this the tip of the iceberg?"

It was. Now, compliance is all Gilbert does. His biggest payday usually comes when he places a chief compliance officer. These people sometimes report straight to the board of directors, and they make really good money, Gilbert says. In April, a very large pharmaceutical company had him looking for a compliance head to come aboard at \$1.5 million a year.

The jobs pay well in part because compliance people take on considerable risk. The dark side to those whistle-blower awards is that the U.S. government can hold compliance officers personally liable for lapses in their programs. And it does. In December, the U.S. Treasury's Financial Crimes Enforcement Network fined Thomas Haider, the former chief compliance officer for MoneyGram International, \$1 million for failing to make sure his company followed anti-money-laundering rules in 2007 and 2008. In May, Haider asked a federal court

As she speaks, the SEC, the Commodity Futures Trading Commission, the Office of the Comptroller of the Currency, and other regulators are pounding out some 400 new rules required by the Dodd-Frank Wall Street Reform and Consumer Protection Act, which was signed into law by President Barack Obama in July 2010 in response to the excesses of the mid-2000s.

One of the most hated restrictions, from the point of view of bankers, is a proposal from the U.S. Federal Reserve aimed at protecting taxpayers from a costly rescue of a megabank. Institutions with the heft (or maybe girth) to take down the financial system, like Lehman Brothers almost did in 2008, would be designated "global systemically important banks" by the Fed. Eight banks qualify, and JPMorgan is

GSIB is most certainly a buzz killer. For some banks, the old business isn't worth all the new hassle.

on the list because it's big, complex, and interconnected.

Hyperbolic bankers make *GSIB* sound like the corporate equivalent of the red *A* Hester Prynne is forced to wear in *The Scarlet Letter*. GSIB is most certainly a buzz killer, because it would force banks to limit risk and keep more capital on hand for emergencies. For some, the old business isn't worth all the new hassle. In April, General Electric announced plans to sell most

consultants and accountants from Deloitte. Siemens paid the two firms \$850 million, according to the *Wall Street Journal*, and then pleaded guilty and paid an \$800 million settlement, a record under the FCPA. It paid another \$800 million in Germany.

JPMorgan's settlements and fines make Siemens's look like a rounding error. The \$36 billion it's handed over since the financial crisis would pay for a whole lot of compliance gurus.

GLOBAL X SCIENTIFIC BETA ETFs

DON'T JUST BE SMART. BE SCIENTIFIC.









Built upon four risk factors that have demonstrated long-term ability¹ to generate alpha²:

VALUE SIZE MOMENTUM LOW VOLATILITY



Carefully consider the Funds' investment objectives, risk factors, charges and expenses before investing. This and additional information can be found in the Funds' full or summary prospectus, which may be obtained by calling 1-888-GX-FUND-1 (1.888.493.8631), or by visiting www.globalxfunds.com. Read the prospectus carefully before investing.

Investing involves risk, including the possible loss of principal. In addition to the normal risks associated with investing, international investments may involve risk of capital loss from unfavorable fluctuation in currency values, from differences in generally accepted accounting principles or from economic or political instability in other nations. The Funds are non-diversified. For the Scientific Beta Japan ETF, the Japanese economy may be subject to considerable degrees of economic, political and social instability, which could have a negative impact on Japanese securities. In addition, Japan is subject to the risk of natural disasters, such as earthquakes, volcanoes, typhoons and tsunamis, which could negatively affect the Fund.

Shares of Global X Funds are bought and sold at market price, not NAV, and are not individually redeemed from the fund. Buying and selling shares will result in brokerage commissions.

Global X Management Company, LLC serves as an advisor to the Global X Funds. The Funds are distributed by SEI Investments Distribution Co., which is not affiliated with Global X Management Company, LLC.

² Alpha is defined as excess return relative to a benchmark index.





¹ Source: ERI Scientific Beta, 2014

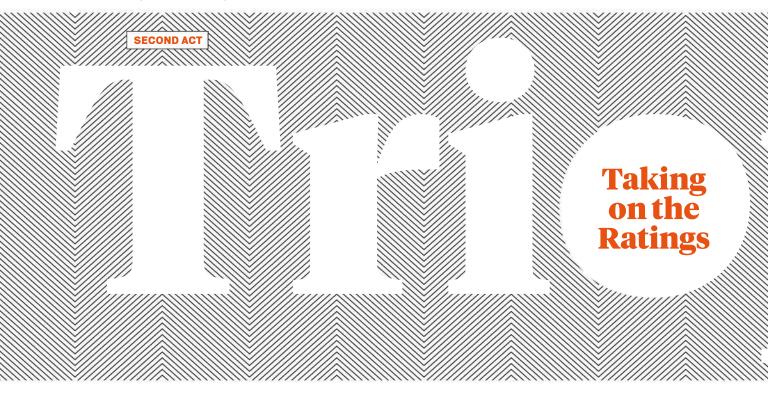
Jules Kroll sensed opportunity. In the wake of the 2008 financial collapse, the reputations of the Big Three credit-rating companies lay in tatters. Standard & Poor's, Moody's Investors Service, and Fitch Ratings had all blessed various mortgage-backed securities with their highest ratings, despite the often shaky subprime loans underlying the securities. Kroll, who made his mark as a financial crimes private investigator, with offices in more than 15 countries, reckoned he could come up with a better way.

"There was enormous disappointment in the country about the way the rating agencies had behaved," Kroll says. "They really let the country down."

A man with a nose for ferreting out corruption, Kroll, 74, pocketed more than \$100 million when he sold his corporate detective firm, Kroll Associates, to Marsh & McLennan

Former private eye
Jules Kroll finds
corporate sleuthing
was a lot easier than
cracking open an
entrenched industry.

BY DAVID EVANS



for \$1.9 billion in 2004. He'd hunted down billions of dollars of assets concealed by Saddam Hussein, Ferdinand Marcos, Jean-Claude Duvalier, and other dictators. With the ratings business, Kroll thought he recognized a lucrative Act 2. He launched Kroll Bond Rating Agency in 2010.

What he didn't bank on was the entrenched power of the Big Three and the unwillingness of investors, even burned investors, to embrace something new. Bond raters accredited by the U.S. Securities and Exchange Commission bring in more than \$5 billion a year. They had been doing business in more or less the same way since the early 1970s, charging corporations and municipalities billions of dollars a year to have their creditworthiness

Those companies and governments, in turn, held out the hope of receiving ratings as high as AAA. Payment to the

rating companies on some subprime debt deals ran as high as \$850.000.

Then came the housing-market collapse and the bond-rating scandal that soon followed. The Big Three came under intense criticism for their role as "key enablers," as a government commission would later report, of the financial meltdown.

Kroll teamed up with Jerome Fons, who had quit his job as managing director of credit policy at Moody's in August 2007, just as the financial system—and Moody's reputation—was teetering on the brink of collapse. A year later, Fons testified to a congressional hearing about what he thought was wrong with the ratings industry. "A large part of the blame can be placed on the inherent conflicts of interest found in the issuerpays model," he said.

Fons, now Kroll's executive vice president, helped design

a rating agency with a completely different model. Rather than have the issuers pay for a rating, Kroll and Fons figured they could charge the bond buyers, since those folks should be willing to pay for information critical to making a wise investment. The strategy flopped even before it began. Investors made it clear they wouldn't pony up for a service they had long received for free. The service was never launched.

"We all wanted to avoid the conflicts that are inherent in the issuer-paid model," says Fons. "The economics just don't work. Investors don't want to pay." The issuer-paid model is still in place across the industry.

Kroll was only starting to find out what it would take to compete. In 2010, he joined the exclusive rating-agency club by purchasing a tiny company called Lace Financial and picking up its credential. The Big Three received theirs from the SEC back in 1975, when they were

"Rating-agency credit assessments are just one input into our investment process," says Calpers spokesman Joe DeAnda, who declined to address why Calpers doesn't recognize ratings by other firms.

After the investor-paid plan didn't pan out, Kroll and Fons figured they'd compete by offering more in-depth analysis, helping investors who do their own independent research. Jim Nadler, president of Kroll Bond Rating, says investors are getting what they need, noting that 25 percent of Kroll's ratings have been issued for securities not rated by any other firm.

Still, it's just a toehold in an immensely lucrative business. Moody's, the only free-standing public company among the Big Three, had a pretax profit margin last year of 43.8 percent, higher than Google or Apple.

"The margins are extraordinary, unlike any industry I've ever been in before," says Kroll, who ran a family printing business before building his global corporate gumshoe



designated Nationally Recognized Statistical Rating Organizations. There are now a total of 10 NRSRO firms, including Kroll. The Big Three accounted for 94.5 percent of the industry's \$5.4 billion in revenue in 2013, according to the SEC. Kroll now ranks No. 5, behind Toronto-based DBRS, in ratings issued.

The path forward is steep. Many institutions still require their money managers to recognize ratings from only the Big Three, despite their well-publicized failures. Earlier this year, S&P agreed to pay \$125 million to the California Public Employees' Retirement System, or Calpers, the largest public pension fund in the U.S., after Calpers alleged the firm had improperly rated three packages of mortgage-backed securities that collapsed in 2007 and 2008. Calpers was one of those institutions whose rating guidelines recognized only the Big Three. It still is one.

practice. Kroll Bond Rating, as a privately held company, doesn't disclose its financial results.

In July 2011, Kroll issued its first rating, for a commercial mortgage-backed security. It was the right place to start. Later that month, Standard & Poor's CMBS business took a huge hit. Investors complained S&P's AAA rating on a portion of an offering was inflated. S&P stunned the CMBS market by abruptly pulling its ratings on a \$1.5 billion offering by

BLOOMBERG TIPS Kroll's Rating Trends

You can use the Credit Rating Trends (RATT) function to track trends in Kroll's mortgage ratings. Type **RATT <Go>** on the Bloomberg Professional service. Click on the arrow in the upper-left corner of the screen and select Mortgage Ratings. Click on the arrow to the right of Agencies and select KBRA. Type **NI CREDITCG <Go>** for news stories on ratings changes. JON ASMUNDSSON

Goldman Sachs and Citigroup, saying it had discovered flaws in its methodology. Morgan Stanley issued a research note to clients blasting the world's largest rating company. "The manner in which S&P took its action has severely eroded investor and issuer confidence in its ratings," Morgan Stanley said. S&P's CMBS rating business was thrown into a tailspin from which it hasn't recovered.

S&P's loss was Kroll's gain. In 2011, Standard & Poor's ranked third in the number of CMBS ratings, as compiled by *Commercial Mortgage Alert*, and Kroll ranked a distant sixth. By 2014, S&P had fallen to the fifth spot while Kroll had ascended to No. 2, rating 65 CMBS deals that raised \$53.8 billion from investors last year. Moody's remained No. 1.

Kroll has continued to chip away, and not just in the niche area of CMBSs. One way it has made inroads is with rock-bottom pricing. In March 2012, Connecticut became the first state in the U.S. to hire Kroll to grade and provide analysis for its general obligation bonds. To win the state's business, Kroll offered a discount: an annual introductory rate for three years of just \$50,000. That was 91 percent less than Moody's price of \$542,525 for fiscal 2014.

Previously, Connecticut did business exclusively with the Big Three. State Treasurer Denise L. Nappier says Kroll was added as a fourth rating company "in the interest of fostering competition." Kroll is banking on other states and corporations following suit.

"It's not a bad business strategy to get people comfortable with your ratings," says Andra Ghent, a professor at Arizona State University who studies the rating business. "It's almost like a loss leader."

More business, of course, brings more scrutiny—no less so when you got your start decrying the model you're now using. On March 17, Kroll reeled in the city of Chicago as a client for its general obligation bonds, assigning a rating of A- and a stable outlook. Less than two months later, Moody's slashed Chicago's rating two notches to junk level (Ba1) after the Illinois Supreme Court rejected a plan to overhaul the state's pension system.

Fitch and Standard & Poor's cut their ratings within three days, and each member of the Big Three set the future outlook as negative. Only Kroll had left its rating untouched, at A- and stable, as of June 1.

Kroll declined to comment on its Chicago decision.

Are those higher ratings justified? "Kroll will say, 'We're better,'" says Lawrence White, a professor at New York University's Leonard N. Stern School of Business. "That may be so, or they may be giving in to make the issuer happy. We won't know until five years from now."



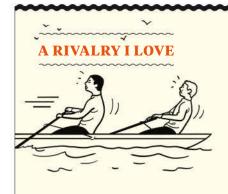
Most years, no university raises more money from its alumni and other donors than Stanford. Who's usually No. 2? Harvard.* But in 2014, for the first time since 2004, the Ivy topped the Tree.



*Harvard's \$35.9 billion endowment still trumps all others, including Stanford's, which, at \$21.4 billion, ranks fourth behind the University of Texas System and Yale University. Source: Council for Aid to Education

82 BLOOMBERG MARKETS JULY/AUGUST 2015

ILLUSTRATION BY KYLE WEBSTER



THE OXFORD AND CAMBRIDGE BOAT RACE

'This is the original university rivalry, in the quintessential team sport, and it takes place over a long and grueling course on the River Thames. Students from all over the world compete for the 18 places and spend countless hours training to beat the other university in the only race that matters for both.'

JIM ROGERS, CHAIRMAN, ROGERS HOLDINGS

Own. Vacation. Rent. Repeat.

ENCORE RESORT HOMES AT REUNION is literally next door to the number one tourist attraction in the world. That means that buying one of our vacation homes not only gives you a prime location to enjoy all that Orlando has to offer, but it gives you a built-in market to rent your home when you're away.

ENCORE Resort Homes

at REUNION™

5–13 bedroom resort homes from the mid \$300s

Orlando, Florida EncoreResortHomes.com 407-396-9000

All amenities, features and facilities described herein are proposed based upon current development plans, which plans are subject to change without notice, and there is no guarantee that said amenities, features and facilities will be provided, or, if provided, will be of the same type, size or nature as described. These materials are not intended to and shall not constitute an offer to sell nor a solicitation of offers to buy or lease real estate at Encore Resort Homes at Reunion by residents of Connecticut, New York, New Jersey and in any jurisdiction where prior registration, license or advance qualification is required but not yet completed or where otherwise prohibited by law. Void where prohibited by law. Renderings contained are based on the current development plans, are conceptual only, and are for the convenience of reference. They should not be relied upon as representations, express or implied, of the final detail, and are subject to change without notice. CBC License Number: CBC 1255355



Enhanced CMBS Presale Reports

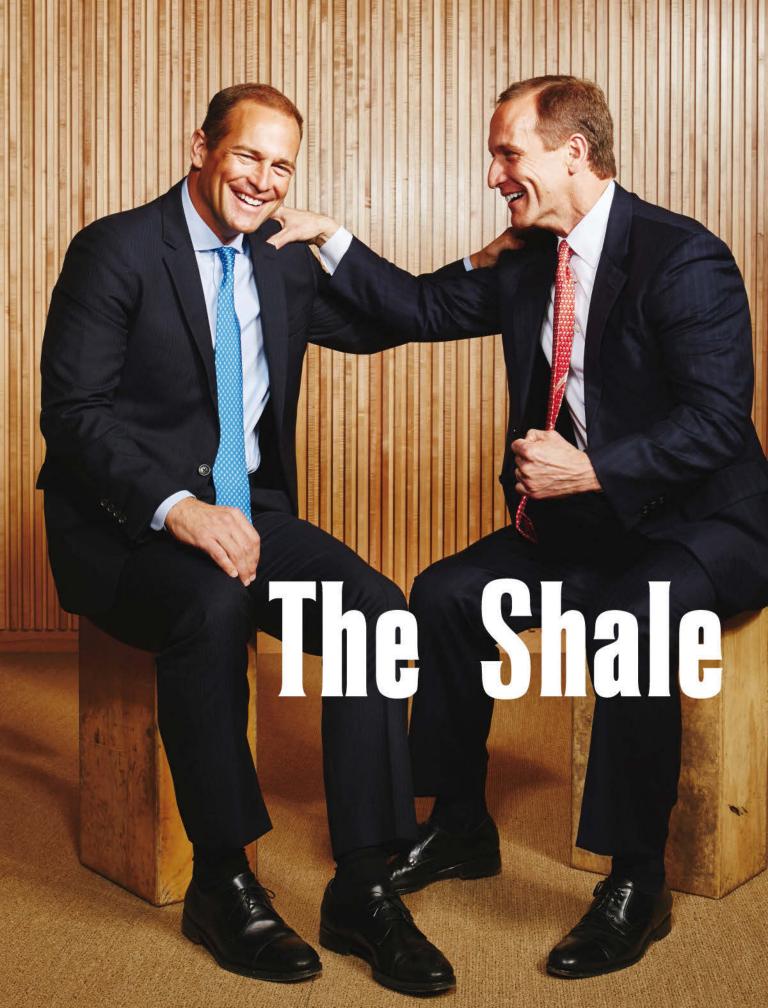
At Fitch Ratings, our CMBS analysts leverage independent thinking and rigorous analytics to develop balanced and insightful ratings, surveillance tools and presale reports. We also continually meet with market participants to ensure our offerings meet changing needs.

That's why we've enhanced our U.S. CMBS presale reports to put more comprehensive deal information right at your fingertips.

TYPE FII <GO>







The Lawler brothers, both energy company CEOs, take on oil, gas, alligators—and each other.

FROM FOOTBALL TO FRACKING

Brothers

Here's a question most brothers might have answered with the gun option: Do you jump on that 9-foot alligator or do you do the more sensible thing and shoot it in the head, given that it weighs a few hundred pounds and could bite you with the force of, say, 12 pit bulls? ¶ If you're the Lawler brothers, who did not get to be two of the hardest-nosed CEOs in the oil industry by making easy decisions, there was only one answer: Jump on it! ¶ So they did—Doug first, of course, since, as he likes to note, he is 17 months older than his "little brother," Dave. ¶ Doug, 48, clambered atop the gator, which had just been dragged unhappily up a bank from a South Carolina wetland as part of a staged hunt. Things started going south pretty quickly. While Doug managed to push the gator's mouth shut, the reptile had other ideas and writhed free, jaws snapping. ¶ Gators aren't that picky. A tough-as-iron businessman is as good to eat as one of those hapless

BY BRADLEY OLSON
PHOTOGRAPHS BY DAYMON GARDNER

Florida poodles that get snatched off leashes from the rim of golf-course ponds every year.

Little brother Dave, not to be left out of the action, jumped in (with mutual friend Trey Ingram recording a video for posterity) and helped to seal the gator's mouth shut with duct tape. The beast was eventually vanquished.

"It really was scary," Doug recalls of the hunt, which they had bought in a charity auction.

Dave gives his brother one of those "I wasn't really scared" looks. The Lawlers like each other as much as they love to rib each other.

What makes this bit of swamp theater all the more interesting is that the brothers have pretty good day jobs. They have each recently been crowned chief executive officers of two of America's largest shale companies: Robert Douglas, by formal name, at

Alligator wrestling is a good metaphor for the task ahead. It requires risk taking, skill, teamwork, improvisation, and more than a bit of luck.

Oklahoma City-based Chesapeake Energy, and David, as he was christened, at a newly formed subsidiary of BP headquartered in Houston.

Former college football players, ferocious competitors, and best friends, the tandem has emerged at the forefront of a new crop of oilpatch CEOs trying to transform an industry amid the worst crash in a generation, with oil and gas prices down 42 percent since May 2014. In a way, alligator wrestling is a good metaphor for the task ahead. It requires risk taking, skill, teamwork, improvisation, and more than a bit of luck.

Dave is charged with helping BP to become a power-house in onshore hydraulic fracturing, or fracking, after the oil giant sat on the sidelines and let mostly smaller, independent companies forge one of America's greatest energy revolutions. The idea is to create a standalone company to mirror the success of the upstarts who created the boom.

Doug, as CEO of Chesapeake, inherited a different dynamic when he took over in mid-2013. In the five years before he arrived, Chesapeake had been run by charismatic founder Aubrey McClendon, who led the company on a shale and natural gas binge, outspending revenues from operations by more than \$44 billion.

McClendon, for a while a rock star in the gas business, resigned in a shareholder revolt. (He declined to comment for this story.) Doug stepped into his mighty, if muddied, shoes.

The Lawlers find themselves in a scrum of new CEOs picked to rein in the excesses of the boom years and find a way to make shale sustainable in the wake of the price collapse. Coloradans by birth, the brothers seem to be determined to have a little fun along the way—occasionally pranking each other in a manner that might be fodder for a sibling rivalry comedy routine.

The Lawlers are making good money—Doug, about \$15 million in 2014 compensation, according to company filings, and Dave, 47, well north of \$1 million, according to a person familiar with the matter. But a few times a year when they go out to dinner, Doug will excuse himself to, say, make a phone call and then disappear, leaving little brother Dave with the bill.

Dave doesn't care and has more than once retorted with: "I've got more hair than he does."

"Well, I played more football minutes than he did," Doug has countered.

"Yeah, well, my gator on that hunt was bigger than your gator." And so on.



Jumping on a 9-foot alligator turned a tad adventurous for **Doug Lawler**.

Banter aside, both are workaholics who took seriously their father's admonition to be "masters of your own destiny," which meant excelling at whatever they did. When Doug went a few miles from home to the Colorado School of Mines, Dave was damned well going to follow. When Doug became a starter on the football team and joined the ROTC program, Dave said, "Watch me." They both made the dean's list and even had almost the same GPA. (Dave's was higher.)

Following that progression, it seems logical—if statistically improbable—they'd both pitch up in the CEO ranks within 15 months of each other. Their missions, however, are "completely different" and because of the oil-price collapse, it "looks a lot tougher than it was even a year ago," says Malone Mitchell, a longtime friend of the brothers who runs an investment company, Riata Corporate Group, near Dallas.

Still, Mitchell has no doubt they'll succeed. In addition to smarts, hard work, contacts, political skills, and the ability not just to lead but to inspire, he says, there's also Dad and Mom. "It's hardly ever that I think about both of them that I don't wonder, 'Who in the world are their parents?" says Mitchell. "They must be pretty incredible."

The senior Lawlers, in fact, seemed a close fit to the everyday icons of the American dream as they raised their sons in the

BLOOMBERG TIPS Tracking Oilpatch Bonds

You can use the Fixed Income Credit Monitor (FICM) function to keep tabs on energy company bonds. For U.S.-dollar-denominated issues, type **FICM USD <Go>** on the Bloomberg Professional service. Click on the High Yield tab. Click on Energy under Bond Sectors. For Chesapeake Energy's bonds, scroll down in the list and click on the company's name. JON ASMUNDSSON

Denver suburb of Lakewood. Their dad, Robert, worked nights as a pressman for the *Denver Post*, and their mother, Nancy, toiled at Macy's and sold Avon products to make ends meet. Money was tight and work was considered not just necessary but honorable. Family supper at the table was mandatory, as was church on Sundays.

Generosity and sacrifice were learned by example, not speeches. Dave recalls a junior high school episode in which students in his class were awarded a day off with three options: skiing, bowling, or visiting a free museum. Dave pushed for skiing, and his parents obliged. Later, he found out his father had worked all night, then all day, then all night again—almost 36 straight hours—to earn money for the trip.

"After that, I no longer asked Mom and Dad if they could give something to me. I wanted to help them," Dave says. "It hit me at a very young age that Dad would in fact work himself to death to give me things."

And so began a love affair with work. Together, the brothers hauled rocks, had a paper route, and worked at fast food joints and garden shops and as gofers on a bridge construction project. At 18 and 16, they and friends remodeled a wreck of a century-old home. For the Lawler boys, this and other projects meant sweat, grime, blisters, and hammer-struck fingers, but Mom was often there encouraging them with a cheery, "Isn't this fun?" She was an energetic presence who, even in the afterglow of her sons' major accomplishments, always asked if



ILLUSTRATION BY KYLE WEBSTER

For the Lawler boys, this and other projects meant sweat, grime, blisters, and hammer-struck fingers, but Mom was often there, encouraging them with a cheery, 'Isn't this fun?'

what they had achieved represented their best work. Nancy died suddenly in 2003 after a stroke at the age of 69.

Robert was one of those attentive dads who didn't sweat the small stuff, trusting his sons to do things such as keep up their grades. But he did plant the seed that landed them in the oil business, taking them at a friend's suggestion on a tour of the Colorado School of Mines, a renowned engineering school. The boys, two classes apart, loved it.

The senior Lawlers had seen the economic benefits oil and gas brought to places such as Colorado, Oklahoma, and Texas. "We thought it would be a good field for them," Robert, 82, recalls. "We knew, as the old saying goes, that oil is here to stay."

The Lawler sons hope that pronouncement remains true. There are lots of skeptics who predict the shale boom can't last and many enemies of oil who consider petroleum as the fuel of the past, not the future.

The way Doug got his first job in the oilpatch showed some moxie. In 1987, just before his graduation from the School of Mines, he and Dave embarked on a road trip. Hiking, biking, camping, fishing? No, on the day after Christmas, they began a 2,500-mile (4,000-kilometer) jaunt to U.S. oil hubs—Oklahoma City, Dallas, and Midland, Texas, staying in cheap motels.

They were prospecting, not for adventure, but jobs. At the first stop, Oklahoma City, Doug donned his best suit, walked into the headquarters of Kerr-McGee Corp., and asked to meet with Robert Namken, vice president of engineering at the company's oil and gas unit.

"Do you have an appointment?"

"No. But I am the student body president at the Colorado School of Mines."

He got in to see the big man—and an hour later walked out employed. He stayed at Kerr-McGee, which was bought by Anadarko Petroleum in 2006, for 25 years, working his way up the ladder from drilling engineer to senior vice president. Doug was seen by upper management as a logical successor to CEO Jim Hackett until Chesapeake poached him in 2013.

Dave—maybe to show his older bro who was the more adventurous spirit—took a radically different course. After graduating from Mines in 1990, he spent most of his career at big oil companies, moving up the ranks during a decade at Royal Dutch Shell. His first senior executive role came in 2007, when he took over as the chief operating officer for Quest Resource and several affiliated companies.

Less than a year into the job, Dave was approached by a company vice president who pointed out \$10 million in bank transfers Quest had made to a firm called Rockport Energy, a money-losing venture co-owned by Quest's then-CEO. Dave immediately notified the company's auditors, a step that eventually triggered company and regulator investigations and the resignation of the CEO, who later went to prison.

Dave, named CEO by the board during the upheaval, had to convince investors not to bail as he worked to clean up a byzantine corporate structure, merging three separate entities with different boards and credit agreements into a single company.

JULY/AUGUST 2015 BLOOMBERG MARKETS 89

STAR TREK AND STAR WARS



'I love both franchises for completely different reasons. Star Trek presents a very positive vision of the future. For me, it's about what's possible and what we want the future to look like. Star Wars is technically about the past; it's almost a creation myth. Growing up, both of those ideas were really interesting and exciting to me—and still are.'

BILL MARIS, FOUNDER AND PRESIDENT OF GOOGLE VENTURES

"He was clear, resolute, and he turned around and executed on everything he said he was going to do," says Riata's Mitchell, who served on the board of what has since become PostRock Energy.

Last August, Dave was tapped by executives of BP's worldwide exploration unit to revitalize the company's U.S. onshore drilling operations and get the company serious about fracking. Peers such as Exxon Mobil and ConocoPhillips had either made acquisitions or developed internal capabilities to perfect the technology while BP flailed about unsuccessfully.

The company has about 5.5 million leased onshore acres it controls throughout the U.S. The idea is to give the new entity "as much room to breathe and to act in a different way as we could," says Lamar McKay, who runs BP's worldwide exploration and production efforts. Dave, he says, is the man to do that.

Doug, meanwhile, has the job of reformatting a company that was seen by shareholders and critics as way too fond of drilling at the expense of its bottom line. "Chesapeake was a great place to work," he says, "but it wasn't a great business."

McClendon, the ex-CEO, was one of those larger-than-life execs who loved to take big gambles on the price of natural gas. He also loved the corporate high life, bragging in interviews about his wine collection and fondness for \$500 or even \$10,000 bottles of his favorite vintages.

Doug is not that guy. Chesapeake during his tenure has sold and spun off billions in assets and slashed spending, nearly halving its net debt to \$7.4 billion in 2014 from \$12.5 billion in 2012. The company-while still posting losseshas cut costs to "industry-low levels" while boosting 2015 first-quarter production by 14 percent over the year-ago quarter, according to its latest financial statement.

As for that expensive vino, here's what Doug said at an event last year: "If you see me out at a dinner, here in Oklahoma City and on company expense, and you see me drinking a \$500 bottle of wine, I would ask you to hit me over the head with it."

On the other hand, Doug could just leave the table-and have his younger brother pick up the check. ВМ

GHAWAR IS THE world's oil spigot. It's the biggest conventional field in the world's biggest-producing country, Saudi Arabia. Statistics about Ghawar—a narrow, deep deposit in porous limestone—are a state secret. The best guess, according to Rasoul Sorkhabi, a geology professor at the University of Utah, is that the field accounts for about 60 percent of Saudi oil.

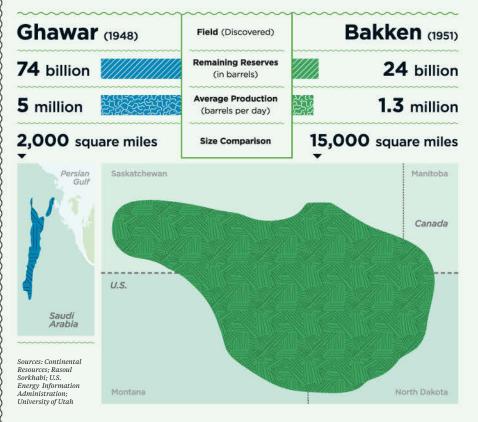
As such, Ghawar is the country's lever on oil prices. Too high, and the Saudis open the nozzle; too low, and they close it a bit. They've been pumping a lot of oil of late the nation produced 10.3 million barrels a day in March, the highest rate in three decades, according to data the country provided to OPEC-in part to drive U.S. shale drillers out of business.

Wildcatters tapping the Bakken in North Dakota, after all, face a much different BY ANTHONY EFFINGER

deposit. Picture a shallow lake of oil sprawling under the Great Plains for hundreds of miles, trapped in dolomite. That requires fracking, and fracking costs money. New wells in the best part of the Bakken break even at \$29, according to the North Dakota state government.

Saudi Arabia, meanwhile, can produce oil from existing wells for \$5 a barrel, Ali al-Naimi, Saudi minister of petroleum and mineral resources, said in December. However, the nation needs an oil price of \$89 to balance its generous state budget, according to the International Monetary Fund.

Can the U.S. keep producing crude out of the Bakken? Yes, but the Saudis' low-cost spigot is a mighty foe.



A bold trade on China.

CHAU Daily CSI 300 China A Share Bull 2x Shares

Direxion 2x Leveraged ETF.



Get started today.
Call 877.437.9363 or go to
direxioninvestments.com/china.
Type DIRX <GO>



An investor should consider the investment objectives, risks, charges, and expenses of Direxion Shares carefully before investing. The prospectus and summary prospectus contain this and other information about Direxion Shares. To obtain a prospectus and summary prospectus or visit our website at www.direxioninvestments.com. The prospectus and summary prospectus should be read carefully before investing.

Investing in the funds may be more volatile than investing in broadly diversified funds. The use of leverage by a fund increases the risk to the fund. The Funds are not suitable for all investors and should be utilized only by sophisticated investors who understand leverage risk, consequences of seeking daily leveraged investment results and intend to actively monitor and manage their investment. The Funds are not designed to track the underlying index over a longer period of time.

Risks:

There are special risks associated with investments in Chinese companies including, but not limited to, exposure to currency fluctuations, less liquidity, less developed or less efficient trading markets, lack of comprehensive company information, political instability and differing auditing and legal standards, the nature and extent of intervention by the Chinese government in the Chinese securities markets, uncertainties in the Chinese tax rules governing taxation of income and gains from investments in A-shares could result in unexpected tax liabilities for the fund

Solving for Outcomes



which may reduce fund returns. Any reduction or elimination of access to A-shares will have a material adverse effect on the ability of the fund to achieve its investments objective. There is potential for unavailability of A-shares to which the fund will seek to obtain exposure through investing in other investment companies. A-shares are issued by companies incorporated in the People's Republic of China ("PRC"). The A-share market in China is made available to domestic PRC investors and certain foreign investors, including those foreign investors that have been approved as Renminbi Qualified Foreign Institutional Investors ("RQFII") or as Qualified Foreign Institutional Investors ("QFII"). The Fund's ability to achieve its investment objective is dependent on the ability of other ETFs and counterparties to obtain their QFII or RQFII quota. If the fund is unable to obtain sufficient leveraged exposure to the CSI 300 due to the limited availability of necessary investments or financial instruments, the fund could, among other things, as a defensive measure, limit or suspend creation units until the adviser determines that the requisite exposure to the index is obtainable. During the period that creation units are suspended, the fund could trade at a significant premium or discount to its NAV and could experience substantial redemptions.

Distributor: Foreside Fund Services, LLC.

GAME OF THE FATHER WHO

Japan can't look away from the wrenching succession dispute at venerable furniture seller Otsuka Kagu.

COULDN'T

IN A COUNTRY where family conflict is usually kept under wraps, the boardroom fight at Otsuka Kagu was as titillating as reality TV.

The company's 71-year-old founder tried to fire his daughter five years after naming her president of the high-end furniture retailer, which is a household name in Japan. It was dramatic, garish, and ugly—and it got everyone's attention the moment Katsuhisa Otsuka used a February news conference to call his daughter Kumiko, one of Japan's few female business leaders, a "bad child."

The Otsuka family drama illustrates the difficulties posed by the retirement of the baby-boomer entrepreneurs, some of whom, like Katsuhisa, are towering figures in Japan. These business founders are leaving their children a country that is sliding into a comfortable decline. A big reason for this is low birthrates, which also explain why two-thirds of Japan's small businesses don't have successors. For those who do succeed their parents, tough choices await.

"You want to respect your parents," says family counselor Hiromi Ikeuchi, the author of 30 books on marriage, divorce, and relationships. "But times are changing, and if you keep doing things the way they did, you could end up destroying the business."

Some 95 percent of Japanese firms are family run, and founding families still exert influence at about 40 percent of the country's listed companies, including big names such as Toyota, Canon, and Panasonic.

A corporate governance code introduced by the Financial Services Agency in June encourages companies to end the kind of insularity that allowed the Otsuka family feud to fester. Listed

BY JASON CLENFIELD

companies will have to appoint two independent directors to their boards or explain why they haven't. The latest filings suggest that more than three-quarters of the country's 3,500 or so publicly traded companies will have some explaining to do.

Otsuka Kagu, founded in 1969, was Japan's biggest furniture retailer through the early 2000s—*kagu* means *furniture* in Japanese—but the business was in decline by the time Katsuhisa handed control to his daughter in 2009. Sales were down 20 percent from their peak, and the stock price had fallen by more than half.

Katsuhisa stayed on as chairman and held on to 18 percent of the company's shares, a major complication for anyone who took over, let alone his daughter.

The heir to the Otsuka furniture throne had other challenges, too. Just 42 when she became president, Kumiko was a lot younger than the executives who had surrounded her father and almost 25 years younger than the average board member at a Japanese publicly traded company.

And she was a woman. Fewer than 1 percent of Japan's biggest companies are led by female CEOs, according to a survey by PricewaterhouseCoopers and Strategy&. To



Kumiko decided to make Otsuka run less like the high-end store her father had built during the go-go growth days and more like Ikea, which came to Japan in 2006, bringing price competition with it. Gone was her father's membership model. Kumiko let customers roam the showroom without being shadowed by a salesperson, and she introduced cheaper items.

Change didn't sit well with Katsuhisa, who lashed out, demoting his daughter in July 2014. The board reinstated her a few months later, but the battle escalated when her father launched a proxy fight, demanding her removal, and then went on TV to let the public know what he thought of her.

Worldwide, some 70 percent of companies fail after succession, according to Joseph Astrachan of the Cox Family Enterprise Center at Kennesaw State University outside of Atlanta. So much can go wrong. Trying to keep everyone happy stops people from making tough choices, those who take over often don't share the founder's passion, and sometimes founders are too prideful to let go. It's not uncommon to call in therapists to mediate or restore calm. "It's just really hard to have a good business and a good family," Astrachan says.

For Masaaki Furuya, an investor who was there for Otsuka's March 29 shareholder meeting, the psychodrama wasn't easy to watch. "It was embarrassing," he says.

The founder rambled on about the early days when he went out canvassing for investors, the joy of raising five children, and Kumiko's difficult birth. The only mistake he ever made, he said, was turning the company over to his daughter. "I've got another 10 or 20 years left in me," he said.

Then his wife, Chiyoko, also a shareholder, joined the fracas. "You would never have been able to build a company like this," she told her daughter. "And another thing: Stop abusing the employees."

Through it all, Kumiko stood stockstill and looked mostly at the floor.

At the end of the meeting, shareholders voted to keep Kumiko as president. She hasn't spoken with her father since, she told the press during an April event announcing a half-off sale on furniture.

ODDSMAKING IN OMAHA

WHO WILL FUCCEED WARREN BUFFETT A4 CEO **OF BERKYLIRE HATHAWAY?**

BY NOAH BUHAYAR AND JOEL WEBER

Warren Buffett is 84. Only the Oracle of Omaha and Berkshire's board know who's destined to eventually fill his Brooks running shoes. Speculation spiked in March, when Vice Chairman Charles Munger name-dropped two executives in the company's annual report: Ajit Jain, who heads its biggest insurance business, and Greg Abel, who oversees energy. (They're known to be team players, unlike the Old Testament rivals their names evoke.) Who's the more likely candidate? Let's compare.

Who's fattened Buffett's wallet more?

Even after a string of profitable acquisitions, Abel's energy utility business is still far from the biggest line on the company's income statement. Jain? "Ajit has probably made a lot more money for Berkshire Hathaway than I have," Buffett once said.



Jain orchestrated some of Berkshire's biggest insurance deals, but competition is challenging that business. Abel's division is only getting bigger as it snaps up more utilities.

Who can protect against the downside?

Buffett has said the next CEO should also be Berkshire's chief risk officer. Nobody knows risk like Jain, who insures against everything from hurricanes to perfect March Madness brackets. Abel has spent almost his entire career in energy.

Who's got more staying power?

Buffett said in his latest letter that the next Berkshire CEO should spend at least a decade at the helm. Jain is 63; Abel is 52.

Who has Buffett's ear?

Buffett and Jain talk almost every day. Abel has only recently gained direct access, having mostly worked in the shadow of David Sokol, who left in 2011 amid a stock-trading scandal.

Who can draw a better org chart?

Buffett famously manages the company's 340,000 employees from an office in Omaha, Nebraska, with about two dozen staff members. Abel's org chart looks similar. Jain's insurance group is much smaller.

Who would the board consider a shoo-in?

Buffett said in 2011 that Jain wasn't looking to take his job, but that, "if he was, the board of directors would probably put him in there in a minute." Abel has never been praised publicly that way by his boss.

Who's learning Portuguese?

Buffett partnered with 3G Capital, an investment firm founded by Brazilian billionaires, to build a food industry giant by backing H.J. Heinz's merger with Kraft Foods Group. Abel will sit on the combined company's board; Jain won't.

Who can handle the limelight?

Both Jain and Abel avoid cameras as much as Buffett seems to seek them out. They rarely speak at conferences and are seldom quoted.

FINAL TALLY: 4-4-1. It would take an Oracle to call this one.



























DeMARK Analytics helps the world's leading investors make sense of natural price rhythms with objective market timing tools. ACCESS DeMARK today to learn how our products can help you identify and exploit patterns.



Glencore boss Ivan **Glasenberg** takes on Rio Tinto's Sam Walsh—and an entire

SAM WALSH, the mild-mannered Australian CEO of London-based mining giant Rio Tinto Group, insists Plessis—in July 2014 and proposed a merger that would likely have cost Walsh his job. Sure, Glasenberg doesn't miss a chance to tell the world that Walsh and his fellow Big Mining executives don't comprehend the basic economics of supply and demand. Still, Walsh told the Times of London in December, "We're big boys, and this is business. It's not personal."

industry. that Walsh and his fellow global mining executives

Except it kind of is. Glasenberg's argument is

he remains on cordial terms with Ivan Glasenberg, the brash South African who leads the global mining and commodities trading firm Glencore. Sure, Glasenberg approached Walsh's boss—Rio Tinto Chairman Jan du

JEREMY KAHN

COMMODITIES CLASH

cost producers of iron ore. So although increased supply pushes down prices and Rio's revenue, the company can still turn a profit-while higher-cost competitors are forced out of the market. When commodities prices rebound, Walsh argues, Rio will be in an even stronger position. It's a long-term strategy that Walsh thinks Glasenberg can't fathom. "Glencore is a trading company; they're very short-term in focus," Walsh told Bloomberg in December. But in a tacit acknowledgment that Glasenberg might have a point, Walsh told an industry conference in Barcelona in May that Rio will curtail its iron ore expansion plans.

> There are plenty of reasons a Glencore-Rio merger might never happen, from antitrust concerns to the

simple: You're in a hole; stop digging. The problem is,

mining execs think they're in the business of digging.

"There's too much focus on big holes in the ground and

not enough focus on return for capital," says Paul Gait,

Putting money where his mouth is, Glasenberg has cut

production at Glencore's thermal coal mines. In his Times

interview, Walsh defended Rio Tinto's approach, saying

that bigger mines provide economies of scale and have

helped make the company among the world's lowest-

a mining analyst at Sanford C. Bernstein & Co.





"screwed up"—the phrase the commodities tycoon used in 2013—by flooding the world with minerals. Take iron ore, which is responsible for almost half of Rio Tinto's revenue and more than two-thirds of its pretax profit. Global yearly output for all miners increased more than 25 percent from 2010 through 2014. Over the same period, the price of Australian iron ore exports to China declined 60 percent. That's not a coincidence, Glasenberg says.

Yet the world's miners—including Rio, BHP Billiton, and Vale-plan to increase production by an additional 16 percent by the end of 2018. "That's what's killing the supercycle," Glasenberg said on Glencore's August 2014 earnings call, referring to the idea that commodities prices had been on a decades-long climb due to surging demand from emerging markets, particularly China. Glasenberg's message to the mining industry is

high premium Glencore would likely have to pay Rio shareholders. Rio rejected Glencore's initial approach. And in the past year, Rio has boosted its dividend to keep investors happy. But no one in the industry thinks Glasenberg—known as an ultracompetitive, alpha-male dealmaker—is likely to go away for good. Ultimately, says Bernstein's Gait, the logic of a Glencore-Rio deal isn't about valuation or business synergies; it's about Ivan Glasenberg proving he's right. "Ivan Glasenberg has made a pretty strong claim that he is the smartest man in the room," says Gait. Sam Walsh might disagree—in a cordial way, of course.



WHAT WE

ENGINEER

CHART

SEE

CLARIFY

UNCOVER

CALCULATE

DISPLAY

DEVELOP

REPORT

PROVIDE

DEFER

UPPL

BOOSTS

SPARKS

IMPROVES

ENLIVENS

FACILITATES

IMPACTS

HELPS

ADVANCES

ENLIGHTENS

FACILITATES

PRODUCTIVITY

EFFICIENCY

PRESENTATIONS

INVESTMENTS

COMMUNICATION

LEADERS

COLLABORATION

OPINIONS

Make your mark.

The world's top investors, traders and leaders depend on our information and news. We need your ideas and passion to help us meet some of the biggest challenges around. Are you ready to make your mark?

jobs.bloomberg.com

Bloomberg

/bloombergcaree

GAME

BY DANIELLE ROSSINGH AND DAVID DE JONG

THE ENGLISH PREMIER League, a playground for billionaires-male billionaires—lures owners from around the globe. Russian Roman Abramovich controls Chelsea, which in May clinched its fourth EPL title in 10 years. Sheikh Mansour bin Zayed Al Nahyan, deputy prime minister of the United Arab Emirates, owns No. 2 Manchester City. Americans control five of the league's 20 teams, including fabled Manchester United and its hated rival, Liverpool.

These men clash in the world's richest soccer league. Abramovich's Chelsea broke the British record in 2011, paying £50 million (\$76 million) to lure striker Fernando Torres from Liverpool, controlled by Boston Red Sox owner John Henry. Club nicknames— Gunners, Hammers, Spurs (as in the blades fighting cocks wear to stab opponents)—proclaim testosterone-infused ambitions.

Into this all-boys club has stepped a female interloper: a low-key Swiss-German heiress named Katharina Liebherr. Her team, Southampton, known as the Saints, plays in the namesake seaside town 75 miles (120 kilometers) southwest of London. Liebherr, 37, brings to the one-time church club what her CEO, Gareth Rogers, calls "real warmth" and "an acute sense of empathy"-attributes rarely voiced, at least as compliments, in British football. But Liebherr is proving herself. She inherited Southampton from her father, Markus Liebherr, after he died suddenly in August 2010. She took charge when Chairman Nicola Cortese

Katharina Liebherr, the only female owner in the English Premier League, is challenging the billionaire boys club of British football as she rebuilds once-struggling Southampton.

departed after a January 2014 power struggle. The tabloids blamed her. "Liebherr the Dream Wrecker!" scolded the Daily Mail. "EXCLUSIVE. REVEALED," trumpeted the Sun. "Woman at center of Southampton nightmare." Liebherr endured more wrath when Coach Mauricio Pochettino defected to Tottenham Hotspur and 10 players transferred last year. By the end of that summer, the Saints were a 6-1 bet at U.K. bookmakers to be booted to a lower division, a fate they last suffered in 2005.

The bookies were wrong, Liebherr has presided over the team's most successful Premier League season ever. Southampton finished seventh with a club-high 60 points. It returned a profit of £33.4 million in fiscal 2014, the first since it almost went bankrupt in 2009. And the Saints-with annual

revenue of £106 million in the 2013-2014 season, a quarter of Manchester United's £433 million—qualified for Europe-wide competition for the first time in 12 seasons. "I'm not going to lie and say it wasn't a difficult summer," CEO Rogers says. "While the entire world was predicting a meltdown, internally that wasn't the case."

Through the ups and downs, Liebherr worked behind the scenes. (She declined to speak for this story.) When Cortese left, she named herself non-executive chairman and promised fans "stability and calm." By March 2014, she'd created a new board. She loaned the team £20 million to clear a debt, added 14 players, and hired Dutch soccer legend Ronald Koeman as coach. She watched from the owner's box at St. Mary's Stadium on April 25 as fans sang, "When the Saints Go Marching in," to greet Tottenham and Pochettino, the coach who'd fled. The Saints, emboldened after beating the 20time league champion Manchester United Red Devils in January, held their own in the 2-2 draw. "They're having a fantastic season." Pochettino said of his former club.

Southampton's turnaround has taken many by surprise. Ralph Krueger, Southampton's new chairman, says tying the Saints last year probably would have been seen as "a disaster" for Tottenham. "Now we have much more respect," he says.

Liebherr was never a football nut. She inherited about \$1 billion. The team, now valued by the Bloomberg Billionaires Index at about \$260 million, was a bonus. Her father, an heir to machinery maker Liebherr-International in Bulle, Switzerland, also designated her as sole shareholder in technology and real estate firm MALI Holding in Horgen. Markus, who'd bought Southampton for £14 million in 2009, didn't live to see it return to the EPL in 2012. Katharina, though, "was hungry for the club to go into a new direction," says Krueger, a former National Hockey League coach. "She loves to speak about being outside of the box," says Krueger, who, like Liebherr, had no soccer experience. He describes her as "warm and open and honest" with "a more motherly kind of instinct."

Soccer has proved a challenge. "She knows she doesn't understand everything about football but has learned by watching," Koeman says. She does know she wants to play in Europe. After vaulting into the UEFA Europa League in May, she's ultimately chasing the UEFA Champions League, the realm of the Manchesters and Chelsea. "People tell us it's not possible, with our budget and our infrastructure," Krueger says. "We believe it is."

Southampton's Florin Gardos, left, challenges top Arsenal scorer Alexis Sánchez in the Saints' 2-0 victory on Jan. 1.



OTEMarkets

83 EXCHANGE GRADUATIONS IN 2014— Find It Here First.







KEY OTCQX®, OTCQB® AND OTC PINK® TRADING STATS:

- \$238 billion in annual trading volume
- 350+ U.S. and global companies trade on OTCQX
- 900+ companies verified to trade on OTCQB
- 1,600+ ADRs representing 50 countries, 2,200+ current SEC-reporting companies, 650+ community banks

Enter OTCQ <GO> on your Bloomberg Terminal to turn on Real-Time Level 2 (OTCQX, OTCQB, OTC Pink, OTC Bonds) Quotes in 10,000 U.S. and Global securities.

Contact us at Market Data Services // marketdata@otcmarkets.com // 212.220.2166 // www.otcmarkets.com











f in ST COTCNEWS @otcmarkets | #otcqx

Neither OTC Markets Group Inc. nor any of its affliates makes any recommendation to buy or sell any security or any representation about the financial condition of any company, Investors should undertake their own due diligence and carefully evaluate companies before investing, Logos are trademarks of their companies and are used with permission, ©2015 OTC Markets Group Inc. All Rights Reserved,



CHRISTIE'S and **SOTHEBY'S** will do almost anything to outmaneuver each other, and the friction between the two will likely only increase under new CEOs.

BY STEPHANIE BAKER AND KATYA KAZAKINA

THIS MAY, AFTER BILLIONAIRES HAD OUTBID BILLIONAIRES

in New York's contemporary art auctions, something became immediately clear: Christie's had just clobbered Sotheby's with a gavel.

Over four days, Christie's sales totaled \$1.7 billion, its biggest week ever. On one of those evenings, frantic bidding inside its Rockefeller Center salesroom enabled the auction house to sell \$706 million of art spanning the 20th century in less than two hours. An anonymous bidder even plunked down \$179.4 million for Pablo Picasso's *Les Femmes*

d'Alger, smashing the record for the most expensive work ever sold at auction. "We're in a fantasyland," proclaimed collector Michael Ovitz, the former president of Walt Disney Co., as he left the room.

In contrast, Sotheby's moved just \$890 million of art in two weeks—a little more than half of Christie's tally—underscoring just how far it had fallen behind its nemesis.

Together, Sotheby's and Christie's control 42 percent of the world's art auction market. The storied houses—both of which recently named new CEOs (more on that in a moment)—have one of

the longest-running rivalries in business history going back to when they were established in London in the 18th century.

And there's even been some good scandal. In the 1990s, the U.S. Justice Department charged the two houses with colluding to fix sales commissions. They eventually paid a total of \$512 million to settle claims by buyers and sellers that they'd been cheated, and Sotheby's chairman at the time, A. Alfred Taubman, spent 10 months in jail.

The competition has become cutthroat: There's simply never been so much money at stake. Sales of art worldwide surged last year to an all-time high of €51 billion (\$57 billion), according to the European Fine Art Foundation. Both auction houses also saw record sales— \$7.9 billion for Christie's (privately owned by French billionaire François Pinault) and \$6.7 billion for Sotheby's. Because Sotheby's is publicly owned, however, its missteps are harder to hide. Profit fell 9 percent to \$117.8 million because of increased expenses.

Sotheby's has also endured a bruising proxy battle led by hedge fund manager Daniel Loeb of Third Point, who accused the company of being "asleep at the switch" and falling behind Christie's in Asia and online. "Sotheby's is like an old master painting in desperate need of restoration," Loeb fumed in a 2013 letter to then-CEO William Ruprecht.

For all Loeb's bluster, he highlighted one of the biggest problems facing New York-based Sotheby's and London-based Christie's. In the hunt to capture market share, the auction houses often tank their

Loeb finally got his way when the board announced Ruprecht's departure in November. It installed Tad Smith, the former CEO of Madison Square Garden, in his place. Admitting he knows little about art, Smith, 50, says he's focused on building the Sotheby's brand, expanding the house in Asia, and boosting its Internet business. He's also vowed to tread carefully with guarantees. "We will not roll dice in the auction room with shareholders' money," Smith told analysts on May 11. Since taking the helm in March, Smith—who sports saltand-pepper hair and a Hollywood smile—has been meeting major clients, such as Ovitz; Don Marron, CEO of Lightyear Capital; and David Geffen, the billionaire entertainment executive, to determine how the auction house can improve its game.

With Smith's appointment, Sotheby's appears to be taking a page out of Christie's playbook. In 2010, Christie's also installed an art world outsider as CEO—Steven Murphy, former head of publishing company Rodale. Murphy invested \$50 million into Christie's online auction platform and expanded its presence in Asia. Then, in December 2014, just two weeks after Ruprecht left Sotheby's, Christie's announced that Murphy would step down, giving no reason for his departure. Patricia Barbizet, a 60-year-old Frenchwoman who had been chairman of Christie's and a longtime Pinault adviser, assumed the role of CEO.

Art dealers and former auction house executives say Murphy left because he sacrificed profit for the sake of gaining market share through excessive use of guarantees. Murphy declined to comment.











Left to right: At Sotheby's, the board replaced William Ruprecht with Tad Smith after Daniel Loeb pushed for change. At Christie's, Steven Murphy's departure made way for Patricia Barbizet.

own commissions. "Sotheby's will think, 'If we don't do it, Christie's will,' and vice versa," says Philip Hoffman, a former Christie's executive who now runs the Fine Art Fund, an investment group in London.

It doesn't help that it's a seller's market, one where collectors play the houses off each other to earn the best deal. In 2013, when newsprint magnate Peter Brant decided to sell Jeff Koons's Balloon Dog (Orange), he shopped the 4-foot-high (1.2-meter-high) stainless steel sculpture to both, hoping the sale would fetch as much as \$75 million, according to people familiar with the matter. Christie's made the winning pitch, they say, by offering to forgo most of its sales commission paid by the buyer. Yet expected bids from Qatar never materialized, and the piece went for \$58.4 million. While that was the highest price ever for a living artist, people familiar say Christie's made no money after marketing and installation costs. (Christie's declined to comment.)

Similarly, Sotheby's has offered lofty guaranteed prices so that sellers don't decamp. Take its sale of Alberto Giacometti's 1950 paintedbronze sculpture Chariot, the prize of Sotheby's biggest-ever Impressionist and modern art sale in New York in November. The gavel went down after just a single \$90 million bid from hedge fund billionaire Steven A. Cohen. The sale accounted for about a quarter of the auction house's total that night and was the most expensive work auctioned in 2014. But Sotheby's had guaranteed the seller, Greek shipping heir Alexander Goulandris, that the work would collect at least \$103 million and had agreed to cover any shortfall. Even after the buyer's commission brought the final price to \$101 million, Sotheby's still lost \$2 million or more, depending on marketing costs, according to people close to the sale.

Barbizet, for her part, dismisses concerns about guarantees. "Our profit margin is good," she says via e-mail. "Guarantees are risk management and offer an assurance to the seller."

Ahead of the May sales in New York, Barbizet floated through the exhibition rooms at Christie's, Pinault at her side. She exuded the house of Pinault, wearing a necklace by Bottega Veneta (a Pinault brand) and a black-and-white striped jacket by New York designer Joseph Altuzarra (in whose company Pinault owns a stake). Barbizet has been a key figure in Pinault's empire since 1989, when she became chief financial officer of his holding company. Though Christie's technically falls under Groupe Artemis, where Pinault's son, François-Henri, is chairman, Barbizet says she talks to 78-year-old François every day. The two paused the longest in front of Giacometti's 1947 sculpture Pointing Man. Later, the work sold for \$141 million, becoming the most valuable sculpture in the world—and trouncing Sotheby's disappointing Giacometti sale in November.

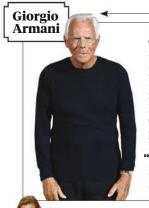
"It's a superaggressive, supercompetitive business," says Thomas Seydoux, founder of private art dealer Connery, Pissarro, Seydoux and a 15-year Christie's veteran. And in that sense, Christie's appears to have the edge.

BLOOMBERG TIPS Appraising Sotheby's

You can use a sample spreadsheet to estimate the value of Sotheby's stock based on the present value of its projected cash flows. Type XLTP **XDCF <Go>** on the Bloomberg Professional service for a description of the Discounted Cash Flow Excel template. Click on the Open button. In the Ticker cell, enter BID US and press <Go>. JON ASMUNDSSON

Feuding Is Always in BY ANDREW **ROBERTS**

Italian fashionistas have never been shy about expressing their feelings, especially toward each other—and, often, it's not a pretty sight. Herewith a sampling.



Miuccia

Prada

The proponent of the soft-shoulder iacket once accused his crosstown Milan rivals Domenico Dolce and Stefano Gabbana of plagiarizing one of his trouser designs:

"Now, they copy; later, they will learn."

Armani has also taken aim at Miuccia Prada, saying that her conceptual collections are "sometimes ugly," her menswear makes men look ridiculous, and that anything she does is "very easy."

(Prada didn't enter the fray and declined to comment.)



The cigar-smoking designer of animalprint dresses, who once dressed up as Karl Lagerfeld for Halloween, said of the German designer's signature black-and-white wardrobe: "Just because you are an artist, you don't have to dress like that. Karl Lagerfeld, he





Lagerfeld, who designs for Romebased Fendi, let Cavalli's barb go. But he's known as an acerbic quipmeister who's had plenty of choice words through the years. For example:



Yves Saint Laurent

He's "very middle of the road."

Emilio Pucci

Getting tattoos is like "living in a Pucci dress full-time."



men

If Lagerfeld were a woman living in Russia, he would be a lesbian, "as the men are very ugly."

"You want to create boredom?" Lagerfeld has said. "Be politically correct in your conversation."

Diego Della Valle

Last year, Della Valle called Fiat Chrysler CEO Marchionne a sola (an Italian insult best translated as "liar") who

"doesn't know anything about cars."

> Sergio Marchionne



"Sure, we still have much

not from him," Dolce and

to learn but certainly

"As Picasso used to say,

copying from others is

from oneself leads to

inevitable, but copying

Gabbana shot back.

sterility."

Domenico

Dolce and

Stefano

Gabbana

A SE and Company, Inc.

Learn how Kase's Apps and market forecasts will revolutionize the way you trade...

APPS KASEOUT<GO> 27

Kase Outlook™ is a comprehensive financial market forecasting tool.

APPS CS:KASE<GO>

Kase StatWare® is a statistically based technical indicator library.

APPS CS:KSX<GO>

KaseX[™] is a symbols based "mega study" designed for precision trading.

FKST<GO>

Kase's Commentaries on Crude Oil and on Natural Gas are highly accurate weekly technical price forecasts.

BOOK <GO>

Get Kase's latest work "Kase on Technical Analysis", a 13-part video series and workbook to learn everything you need to know about analyzing markets like Kase.

Cynthia A. Kase - Founder

Photograph by Daniel Nadelbach 2011







KaseCo.com

Whatever your market, we've got you covered

Credit

- Comprehensive coverage includes Investment Grade, High Yield, Structured Finance, Loans, and Emerging Markets.
- Evolution of new deals from rumour and mandate, through guidance, launch, and pricing supported by insightful commentary
- Daily briefings easy reference detailing market-moving developments & upcoming issuance
- Supported by an extensive database of public deals, including league tables, volume reports, deal lists and distribution statistics
- Renowned market professionals have extensive experience and are trusted sources on the Street

FX

- Comprehensive FX offering covering FX Majors, Emerging Markets, FX options and Central Banks.
- Market leader for inside track information on fx flows
- Rapid interpretation of price moves
- Award-winning technical analysis with actionable trading ideas
- Around the clock Market Pulse coverage –
 24 hours a day from a team of market experts located in London, New York, Tokyo,
 Hong Kong, Shanghai & Singapore

Since the 1970s, IGM has set the standard for real-time analysis of the financial markets providing unrivaled coveraged of the global foreign exchange, sovereign fixed income, credit, and emerging markets.

Market commentary is provided 24 hours per day by our dedicated team of economists, market strategists, technical analysis and market professionals.

Fixed Income

- Combination of on-the-spot market analysis with comprehensive commentary on all issues critical to fixed income and money markets.
- Rapid interpretation of breaking news and market moves adds value beyond the news
- Technical analysis unrivalled range of instruments covered on an intraday basis (futures, cash, spreads, equity indices) with actionable trading ideas

informa global markets

Visit IGM<GO> or contact sales at: (212)907-5802

New York, London, Hong Kong, Shanghai, Singapore, Tokyo



STRATEGIES

PROFILE

Seeking Asymmetrical Opportunities

Ryan Melkonian's LTE Partners hedge fund returned 34 percent last year by identifying private equity, real estate, and stock investments with small risk and large upside potential.

BY JON ASMUNDSSON

RYAN MELKONIAN SAYS the strategy he developed for LTE Partners was shaped by a couple of experiences earlier in his career.

First, from his perch at a New York family office in the 1990s, he saw how different asset classes outperformed at different times. "We invested in everything from equities to fixed income, to real estate, to private equity," he says.

Then, as a portfolio manager at New York equities shop W.P. Stewart & Co. in the late '90s, he saw stock valuations go to extremes before the tech bubble burst. For stock fund managers, there was little place to go except down. "When you have a mandate that requires you to be fully invested or to be in a specific asset class, it is very difficult to outperform for long periods of time," Melkonian, 45, says.

So as a way to handle market cycles and avoid losses, Melkonian's \$100 million event-driven hedge fund rotates across liquid and illiquid assets—investing in stocks, private companies, and real estate. The fund is concentrated, typically holding 10 to 20 investments. The number of positions and allocations to different assets varies depending on where

the best opportunities are at a given time, says head of business development Marty Harmon.

The approach has paid off. LTE Partners rose 34 percent in 2014, according to an investor letter obtained by Bloomberg. What's more, the fund has not had a losing year since it was launched in 2001. When markets collapsed in 2008 and the Standard & Poor's 500 Index plunged 37 percent, LTE Partners eked out a 1.8 percent gain. From Oc-

ners eked out a 1.8 percent gain. From October 2001 to April 2015, the fund's total net return was 482 percent, or an average of about 14 percent a year. By comparison, the S&P 500 rose 7.3 percent annually over the 13-year period.

LTE PARTNERS IS managed by Melkonian. New York-based Melkonian Capital Management—whose investment committee is headed by Melkonian and includes his brother, Matt; John Layton; and Harmon—oversees a total of about \$175 million.

The committee members seek what Melkonian calls asymmetrical

RYAN MELKONIAN, MATT MELKONIAN, JOHN LAYTON, MARTY HARMON INVESTMENT COMMITTEE, MELKONIAN CAPITAL

- Invest in private equity, real estate, and stocks.
- > Look for **adverse events** that make assets undervalued.
- ➤ Target a concentrated portfolio of 10 to 20 investments.



THE FUND BOUGHT

SHARES OF

JPMORGAN IN

THE \$30s AND

SOLD IN THE \$50s.



opportunities. "We're not looking for 5 percent down and 15 percent up," he says. "We're looking for modest downside and 100 percent upside."

What creates such opportunities? Market dislocations, for one. Adverse events sometimes make

> investors overreact so that companies with good long-term prospects get beaten down more than is warranted, Melkonian says.

> An example is JPMorgan Chase after the London Whale losses emerged in April 2012. "You had a massive correction in the stock," Melkonian says. The share price plunge shaved almost \$60 billion off the value of the company.

> > TIP BOX

Type PE <Go>

Equity Overview

for the Private

function.

"They lost one quarter's worth of earnings-and the long-term view is this company is worth 35 percent less?" Melkonian says. "We didn't think it

in 2012 and sold in the mid-\$50s in 2014.

LTE Partners is the largest investor in Browz, a Salt Lake City-based company that collects insurance information, accident rates, and other data from contractors; verifies it; and determines which suppliers meet the safety requirements of a hiring

uation. "Six years into it, they'd burned through the cash," he says. The company had proved its concept, though, and landed some key customers, he says.

LTE Partners invested in the company at a valuation of less than \$20 million—lower than the valuation in its earlier round of fundraising. Browz has since increased revenue fourfold. "We sold a piece of this company earlier this year at a \$150 million valuation," Melkonian says. "I think it's easy to see how this could become a billion-plus-dollar company."

LTE PARTNERS SOLD out of another private company last year: Vidara Therapeutics. Vidara was created to buy the rights to Actimmune, a drug used to treat chronic granulomatous disease, a genetic immune disorder. LTE Partners invested in Vidara in June 2012. In March 2014, Horizon Pharma, which was then based in Deerfield, Illinois, announced it would buy Dublin-based Vidara for \$660 million in a so-called tax inversion. "That was a 14-times return," Melkonian says.

The fund's largest real estate investment is a 63-

acre (25-hectare) parcel it has assembled on Grand Cayman. "It's a small island, there's not a lot of beachfront property, and it's almost all developed," Melkonian says. In 2009, a developer who was having trouble raising financing sold LTE a 6-acre parcel of land with one of the few sandy

beaches on the south side of the island. "We've made 30 acquisitions around the periphery," Melkonian says. In December, the Cayman Islands government approved rezoning that would allow hotels of up to 10 stories to be built on the land.

Melkonian says the firm is doing a lot of research on energy companies these days. "With the fall in oil prices, there's going to be some real winners and losers," he says. "These extreme dislocations create opportunities."

Jon Asmundsson is Strategies editor of Bloomberg Markets jasmundsson@bloomberg.net

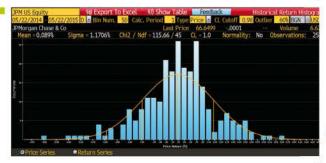
would massively impact their long-term prospects." The fund bought JPMorgan shares at an average price in the mid-\$30s

The committee members apply a similar value-oriented approach to investing in private companies and real estate.

company. "What Browz does is take over supplier compliance," Melkonian says. Melkonian says he initially passed on Browz when it was raising money about 10 years ago. In 2010, though, the company was in a distressed sit-

TRACKING LARGE-CAP VOLATILITY

Ryan Melkonian says price swings in large-cap stocks offer opportunities these days. "They're safer investments," he says. "But what we've seen in recent times as there's more electronic trading is there's a lot more volatility in these names." You can use the Historical Return Histogram (HRH) function to track the distribution of returns for a selected stock. Type JPM US < Equity> HRH <Go> to analyze JPMorgan's share price moves. Slide the range indicator at the bottom of the screen to view different periods. JON ASMUNDSSON



Emerging Markets

BI CHINA <Go>

lets you access Bloomberg Intelligence research on China's economy.

OTC <Go>

lets you monitor trading in various markets in a selected country.

XLTP XCRA <Go>

lets you analyze and compare country risk for more than 60 developing countries.

BYFC <Go>

displays bond yield forecasts for a selected region.

IFMO <Go>

lets you track inflation in a selected region.

ECFC <Go>

displays economic forecasts for a selected country.

ECTR <Go>

lets you track trade flows for a selected country.

EMMV <Go>

monitors trading in major markets in developing countries.

FICM <Go>

lets you track real-time performance of U.S. dollar-denominated. emerging-markets corporate bonds.

FXFA <Go>

lets you analyze pricing relationships between currency spot and forward rates and interest rates so you can identify arbitrage opportunities.

IRSB <Go>

displays interestrate-swap rates for a selected country.

ISLM <Go>

lets you access data. news, and research related to Islamic securities.

SRSK <Go>

lets you view model-generated, one-year default probabilities.



WB E <Go>

countries.

WFII <Go>

displays data on

foreign portfolio

WCRS <Go>

currencies by spot

return or other metrics.

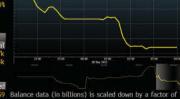
lets you rank

investment flows.

tracks sovereign yields

for emerging-markets

2) MMA Southbound Stocks



3) MMA Dual listed Stocks

↑ MMA <Go>

lets you monitor trading activity between the Shanghai and Hong Kong stock exchanges.

XLTP XEEM <Go>

lets you track trading in a variety of financial markets across developing countries.

SOVR <Go>

monitors sovereign credit-default swaps.

WCDM E <Go>

lets you track debt levels for emerging markets.

XLTP XFLO <Go>

lets you track cross-border flows for emerging-markets countries.

ranks emerging sovereign-bond markets by real-time moves versus averages.

WBMV E <Go>

MRKT <Go>

lets you find price contributors for a selected country.

WVOL <Go>

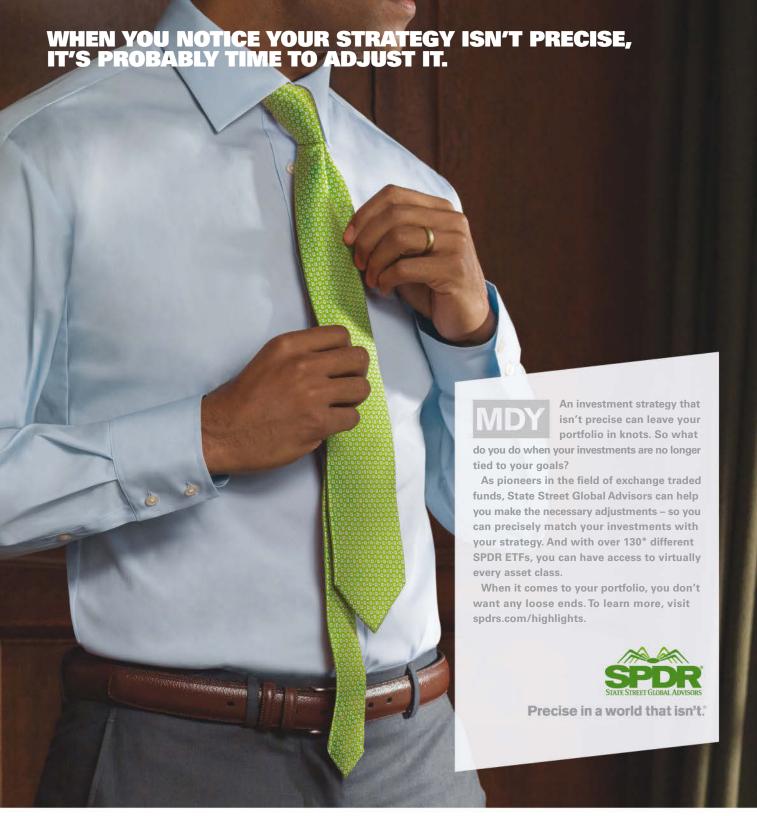
displays a snapshot of currency volatilities around the world.

Compiled by JON ASMUNDSSON jasmundsson@bloomberg.net



Want to learn more? Turn over to read our ad.

PULL OUT AND SAVE. // PRESS < HELP > TWICE TO SEND A QUESTION TO THE BLOOMBERG ANALYTICS HELP DESK.



STATE STREET GLOBAL ADVISORS



Before investing, consider the funds' investment objectives, risks, charges and expenses. To obtain a prospectus or summary prospectus, which contains this and other information, call 1.866.787.2257 or visit www.spdrs.com. Read it carefully. ETFs trade like stocks, fluctuate in market value and may trade at prices above or below the ETFs net asset value. Brokerage commissions and ETF expenses will reduce returns.



The SPDR S&P MidCap 400 ETF Trust is an exchange traded fund designed to generally correspond to the price and yield performance of the S&P MidCap 400 Index! $^{\text{M}}$

"SPDR" and S&P MidCap 400 are registered trademarks of Standard & Poor's Financial Services, LLC ("S&P") and have been licensed for use by State Street Corporation. No financial product offered by State Street or its affiliates is sponsored, endorsed, sold or promoted by S&P.

ALPS Distributors, Inc. is distributor for SPDR S&P MidCap 400 ETF Trust, a unit investment trust.

*As of June 30, 2014

IBG-11506 TYPE SPDR <GO>

How to Understand What's Driving a Smart-Beta Fund

BY NICK BATURIN AND JOSHUA LITWACK

SMART BETA OFFERS the possibility of beating benchmarks. That's the main attraction for smartbeta investors, who hold more than \$400 billion in such exchange-traded funds—about one-fifth of total U.S. ETF assets.

What's the source of smart-beta ETFs' potential outperformance? One way of looking at it is in terms of factors.

Factor models break down the return of a security into its exposures to a set of so-called factor returns. Such models are mathematically complex, but the underlying idea is simple. Take the market factor. The performance of a stock on a given day likely reflects what's happening in the broader market. So the performance of shares of Yum! Brands, say, may be driven by the stock's exposure to the U.S. market factor return—along with its exposure to other factors, such as growth, value, and size.

O billion in ne-fifth of learning to the factor Based lutt. Percentage Risk Model Us Egityr Funda Factor Group Return Contribution Fields Selection Effect Country Industry Coun

Type **PORT <Go>** and click on the Attribution tab to analyze a selected smart-beta ETF.

SMART BETA ISN'T precisely defined, but the term generally refers to ETFs that weight their investments according to some criterion other than market value or price. A dividend ETF, for example, invests in equities that pay high dividends; an equal-weight ETF holds all of its component stocks in equal amounts. So the factor exposures of smartbeta funds differ from those of traditional benchmarks. That's a key source of their potential to outperform. For one thing, smart-beta ETFs may be able to tap into anomalies such as the premiums associated with low volatility or small market caps.

To dig into a selected smart-beta ETF and see which factors are driving its returns, you can use Bloomberg's multifactor risk models in the Portfolio & Risk Analytics (PORT) function.

Let's take a look at the \$11.4 billion Guggenheim S&P Equal Weight ETF, for example. As its name indicates, the Guggenheim fund weights its investments equally. The fund apportions about 0.2 percent of its assets to each of the 502 members of the Standard & Poor's 500 Index. By contrast, the \$176 billion SPDR S&P 500 ETF Trust, or SPY, tracks the market-cap weighting of the benchmark. That emphasizes big stocks. Apple, for instance, accounts for about 4 percent of SPY's portfolio.

Type **RSP US <Equity> PORT /P <Go>** on the Bloomberg Professional service to run PORT on the Guggenheim fund. To compare it with SPY, click on the arrow to the right of Vs and select [More Sources ...]. Click on Funds/ETFs/13Fs,

enter *SPY* in the field, and click on the SPY US Equity item. Then click on the Select button.

Click on the Attribution tab. To specify that you want to use factor-based attribution in your analysis, click on the Settings button on the red tool bar and select Calculation Defaults. Click on the arrow to the right of Attribution Model and select Factor Based if it isn't already selected. Click on Save.



To use the U.S. equity fundamental factor model, click on the arrow to the right of Risk Model, select US Equity Fundamental, and press <Go>. (For detailed information about the model, type **BPS L#2073620 <Go>** on another screen.)

LET'S EXAMINE TWO different periods: the third quarter of 2011 and the first quarter of 2015.

First, click on the arrow to the right of Time and select Custom. Enter *06/30/11* and *09/30/11* and press <Go>. Click on the Summary subtab. Markets tanked in the third quarter of 2011 amid talk that Greece might exit the euro and the U.S. could default on its debt. The Return section of the screen shows that the Guggenheim fund underperformed SPY by 3.86 percentage points.

The chart in the center of the screen breaks down the relative return into its sources. Country factors contributed a tiny amount to the underperformance. Industry factors added 0.9 percent to the Guggenheim fund's relative return. Style, however, accounted for 2.31 percent of the underperformance. To drill down to individual style factors, click on the Style bar. The most dominant single driver of return was the U.S. size factor.

Unfortunately for the fund, the factor contribution was negative during the period. Large-cap stocks out-

performed small caps, so the U.S. size factor had a 1.01 percent positive return. The fund had an active exposure of -0.89 to the U.S. size factor. The factor thus contributed -0.88 percentage points to the fund's relative return.

The third quarter of 2011 was a down market. In dropping markets, large caps typically outperform small caps.

Next, let's look at the first quarter of this year. Enter 12/31/14 and 03/31/15 in the date fields and press <Go>. For that period, the Guggenheim ETF outperformed SPY by 0.85 percentage point. Once again, we see that the U.S. size factor is the main driver. During this period, however, the U.S. size

factor contribution was positive for the Guggenheim fund: Small-cap stocks outperformed.

Factor-based attribution can give you insight into what happened in the past. What about the future? For the Guggenheim fund, the U.S. size factor will likely remain one of its main return drivers.

Based on Bloomberg research and on numerous academic studies, small-cap stocks have outperformed large-cap stocks over the long term. The cumulative annual return of the U.S. size factor was –2.6 percent from Jan. 1, 1999, to March 31, 2015. So a smart-beta ETF such as the Guggenheim fund, with an average active U.S. size exposure of –0.89, should outperform by 2.32 percentage points a year on average over the long term.

Nick Baturin is the head of portfolio and risk analytics research at Bloomberg in New York. nick.baturin@bloomberg.net Joshua Litwack is a portfolio and risk analytics product specialist in San Francisco. jlitwack@bloomberg.net

TIP BOX

Type **ETF <Go>** to find funds that match your criteria.



Short selling intelligence for global investment managers.

Gain insight into market sentiment, borrow rates and availability for global securities, integrated into Bloomberg on SI < GO >. Make informed decisions with data covering \$15tn+ of global securities in the lending programs of 20,000+ institutional funds.

Trading

Portfolio management

Operations

Risk management

Quantitative strategies

Learn more:

sales@markit.com

Request a trial subscription on DXPL < GO >

Bloomberg ____

Brazil's Silver Lining: Exports

BY ROGER OEY AND GASPARD MONNOYER

BRAZIL HAS BEEN buffeted by weak growth, low commodities prices, and rising interest rates. There's one silver lining, though. The weak real has helped Brazilian exporters by making their products more competitive.

To chart the currency, type USDBRL < Crncy> GP <Go> on the Bloomberg Professional service. To add the Ibovespa stock index, click on Security/ Study and then on Add Security. Enter IBOV in the field that appears and click on the IBOV Index item in the list of matches. This year through June 1, the real weakened 16 percent against the U.S. dollar, while the Ibovespa rose 6 percent.

TO SEARCH FOR Brazilian exporters, type EQS <Go> for the Equity Screening function. In the field under Add Criteria, enter BRAZIL and click on the Country of Domicile match. Next, enter EXPORT and click on Export Sales. Select > Greater Than. Enter 0 in the field below. Click on the arrow to the right of Export Sales, select Latest Quarter, and press <Go>. As of June 1, that trimmed the list of Brazilian companies to 39.

Let's add one more criterion that will display the proportion of each company's total revenue that it derives from exports. Enter EXPORT SALES RATIO in the field, click on Percentage of Export Sales Ratio, and press <Go>. Click on the Results button.

To sort the list by the percentage of total revenue from exports, click on the % Xprt Sl Rt column heading. Among the companies with the largest



Type **EQS** <Go> to search for Brazilian exporters using the Equity Screening function.

proportion was Fibria Celulose. The São Paulo-based forest products company derived 90.5 percent of its revenue from exports in its most recent quarter. Its shares traded at 43.75 reais on June 1, up 35 percent for the year.

At the other end of the export spectrum was Cia. Hering. The

Blumenau, Brazil-based clothing retailer got only 2.1 percent of sales from exports. To chart the two stocks, click on the graph icon to the left of their tickers. Hering traded at 13.16 reais on June 1, down 35 percent this year.

Roger Oey and Gaspard Monnoyer are market specialists at Bloomberg



TIP BOX China is Brazil's No. 1 trading partner. For more info, type **ECTR BR**

<Go>

in São Paulo. roey3@bloomberg.net, gmonnoyer4@bloomberg.net

Communicated, as applicable, by Bloomberg Tradebook LLC; Bloomberg Tradebook Europe Ltd., authorized and regulated by the U.K. Financial Conduct Authority; Bloomberg Tradebook (Bermuda) Ltd.; Bloomberg Tradebook Services LLC. This communication is directed only to market professionals who are eliqible to be customers of the relevant Bloomberg Tradebook entity. Please visit http://www.bloombergtradebook.com/pdfs/disclaimer.pdf for more information and a list of Tradebook affiliates involved with Bloomberg Tradebook products in applicable jurisdictions Neither Bloomberg Finance L.P. nor any of its affiliates ("Bloomberg") is a Nationally Recognized Statistical Rating Organization (NRSRO) in the United States or an officially recognized credit rating agency in any other jurisdiction. Bloomberg's ratings have not been solicited by issuers, and issuers do not pay Bloomberg any fees to rate them or their securities. Customers should not use or rely on Bloomberg's ratings to comply with applicable laws or regulations that prescribe the use of ratings issued by accredited or otherwise recognized credit rating agencies. Bloomberg's ratings and related data are not investment advice or recommendations of an investment strategy or whether to "buy," "sell," or "hold" an investment advice or recommendations of an investment strategy or whether to "buy," "sell," or "hold" an investment advice and the sell of the sell

July/August 2015, volume 24, number 7. BLOOMBERG MARKETS (ISSN 1531-5061, USPS 008-897) is published monthly with a combined July/August issue by Bloomberg Finance L.P., 731 Lexington Ave., New York, NY 10022, and distributed free to subscribers of the BLOOMBERG PROFESSIONAL service. POSTMASTER: Send address changes to Circulation, BLOOMBERG MARKETS, P.O. Box 1583, New York, NY 10150-1583. Periodicals postage paid in New York and at additional mailing offices. ©2015 Bloomberg Finance L.P. Bloomberg Finance reserves the exclusive right to reproduce or authorize reproduction of articles. Advertisers and ad agencies assume liability for all ad content





Cartier



TANK MC MANUFACTURE MOVEMENT 1904 MC

SINCE THE CREATION OF THE FIRST TANK WATCH IN 1917, THE TANK COLLECTION HAS CONTINUED TO BREAK NEW GROUND. THE INCREDIBLY REFINED AESTHETICS OF THE NEW TANK MC WATCH ARE FITTED WITH THE CARTIER MANUFACTURE MOVEMENT 1904 MC. ESTABLISHED IN 1847, CARTIER CREATES EXCEPTIONAL WATCHES THAT COMBINE DARING DESIGN AND WATCHMAKING SAVOIR-FAIRE.